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HARDWAR - INDIA

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THE VEDIC PATH

(New name of the Vedic Magazine - the organ of
Gurukula Kangri Vishwavidyalaya 1906-1936)



आ नो भद्राः ऋतवो यन्तु विश्वतः

Let noble thoughts come to us from every side.

Rigveda 1-89-1.

Gurukula Kangri Vishwavidyalaya

P. O. Gurukula Kangri, Haridwar, U. P.

INDIA.

*Vol. XXXVII,
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THE VEDIC PATH

A new name in the Vedic Movement - the organ of
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The Message from

Shri G. B. Kumar Hooja, M. A., I. A. S. (Retd)

VICE-CHANCELLOR

Gurukula Kangri Vishwavidyalaya, Hardwar.

When my illustrious predecessor, Dr Satyaketu Vidyalkar, D. Litt. (paris), undertook to revive the Vedic Magazine, the internationally known organ of the Gurukula kangri Vishwavidyalaya under the title, "The Vedic Path", last year, I felt over-joyed and expressed the hope that in his able hands this Journal will carry forward the torch lit by our worthy predecessors and shall be "conducted on broad and catholic lines and in a spirit of absolute independence and for Truth", as envisaged by them. This journal was released by His Excellency Dr M. Chenna Reddy, Governor, Uttar pradesh, on the 14th April, 1976; on the occasion of the convocation of Gurukula kangri Vishwavidyalaya.

During my recent travels abroad, I met several Indians and non-Indians who have expressed great appreciation of the effort of the Gurukula Kangri to revive the Vedic Magazine. In London, Shri F.C. Sondhi, Prof. Bharadwaj, Dr (Mrs) C. Sayal and other members of the Hindu Centre, including Mrs. Savitri Chowdhary, widow of the late Dr Dharmasheel Chowdhary, an old Snataka of the Gurukula, enthusiastically welcomed the emergence of the Vedic Path. Similarly, in Ottawa, Dr Harsha Dehejia and Dr Hari Johri evinced keen interest in this project. Dr Dehejia is a medical practitioner there, but it is his self-chosen hobby to produce records containing the 'Subhashits' of Vedic Literature. In this, he is ably assisted by his venerable father-in-law, Shri Gangal, and sweet wife, Sudha, and the family thus operates as a medium for the propagation of Indian culture in Canada. Dr Dehejia suggested that it would be appropriate if the Vedic path publishes a series of articles under the title, "Chanakya Revisited." Similarly, Dr Johri desired that we may publish research articles on Surgery in Ancient India. Dr and Mrs Prem Bhalla of Jackson State University have also conveyed their deep appreciation for this Venture and are eagerly looking forward to the publication of Stories from the Ramayana and the Mahabharata in the Vedic path for the benefit of their children growing in the other hemisphere. There is apparently a vast sector of population in the Western hemisphere which is desirous of getting acquainted with the achievements of ancient Indians in the various fields, political, commercial, technical, literary, educational, yoga, etc. The Vedic Path could certainly serve as an instrument for projecting the true image of India abroad.

At the same time, by publishing articles on the Vedic way of life, it would meet a genuine demand in the West, felt not only by the people of Indian origin but also of other nationalities, to seek guidance and wisdom from the Indian Rishis. The names of Swami Vivekananda, Swami Ramatirtha, Sri Aurobindo, S. Radhakrishnan, Swami Chinmayananda, Swami Ranganathananda and other savants and ambassadors of Indian culture are mentioned with great respect in the academic and cultural circles of Western countries. However, the West is comparatively unaware of the rich contribution made by Rishi Dayananda to the renaissance movement of India, and Swami Shraddhananda who blazed a new trail in the educational field in India.

The greatest contribution of Rishi Dayananda lies in the importance he attached to the study of the Vedas and the emphasis he laid on moulding the individual and social behaviour in accordance with the Vedic precepts. During the course of time, Vedic light came to be obscured by meaningless rituals, obscurantism and superstitions. Vast sections of the society were barred from the study of the Vedas, particularly the women and the so-called Sudras. It was left to Dayananda under the promise he made to his guru, Virajananda, to declare that the Vedas were not the monopoly of one class. They were meant for the entire mankind. Not only this he disputed the interpretation laid on the Vedas by orthodox commentators and challenged contemporary pandits and scholars to hold 'shastrarthas' (discussions) with him. Thus he sought to dispel the mist of age long prejudices and could restore the pristine glory of Vedic thought.

As Sri Aurobindo writes, in the matter of Vedic interpretation, Dayananda will be honoured as the first discoverer of the right clues. Amidst the chaos and obscurity of old ignorance and age-long misunderstanding, his was the eye of direct vision that pierced to the Truth and fastened on that which was essential. He found the key of doors that time had closed and rent asunder the seals of the imprisoned fountain.

In the words of Romain Rolland Swami Dayananda was a ruthless critic of all who, according to him, had falsified or profaned the true Vedic religion. He was a Luther fighting against his own misled & misguided church of Rome He transfused into the languid body of India his own formidable energy, his certainty, and his lion's blood. He set the example of a complete clearance of all the encumbering growth of the privilege and prejudice by a series of hatched blows.

It needs to be restated here that Dayananda did not work for the people of India only. He lived and worked for all mankind. His mission was to dispel darkness from all corners of the world. His self-

imposed task was to extricate the entire human society from bondage and the evilways into which it had fallen owing to wrong beliefs and faiths. Let me quote what he says in his *Magnum Opus*, the *Satyartha Prakasha* :

“Though I was born in Aryavarta (India) and still live in it; yet just as I do not defend the falsehoods of the religions prevailing in this country but expose them fully; in like manner I deal with the religions of other countries and their supporters. I treat the foreigners in the same way as my own countrymen so far as the elevation of the human race is concerned. It behoves all men to act likewise.”

Of course, situated as he was, in the first phase he had to operate in the Indian sub-continent; and it was from this base that he wished to enlighten the entire globe. He often quoted approvingly a verse from the *Manusmriti*, which says :

“It was from the Brahmin born in India, that all the people in the world learnt respective cultures.”

Sri Aurobindo hailed Dayananda as a formidable artisan in God's workshop, a very soldier of light, a warrior in God's world, a sculptor of men and institutions, a bold and rugged victor of the difficulties which matter presents to spirit.

Inspired by the Light of the Vedas, armed with faith in God and endowed with a piercing intellect, he waged a relentless war single-handed against the evil forces of idolatory, untouchability, child-marriage, enforced widowhood, suppression of women, taboo on foreign travel and countless such other customs which had led to the degeneration of the Indian society over the centuries. No doubt, beginning with Raja Rammohan Roy (1772-1883) India can claim to have produced a galaxy of redoubtable stalwarts and eminent reformers in the nineteenth century, but unquestionably Dayananda (1824-1883) occupies a unique position amongst them. Goaded by his blind guru, Virajananda, Rishi Dayananda undertook to translate into action the following commandment of the *Yajurveda* and it is for the Vedic Path to fulfil his unfinished task :

“Just as I have given this beneficial knowledge to you, just so it is your duty to transmit it to others whether sages, warriors, serving class, trading Class or even the lowest.”

(*Yajurveda* 26/2)

The impact made by the Rishi has been beautifully summed up by Christina Albers in the following lines :

(viii)

The spirit wings of life in darkness veiled
 Drooped sadly over India's ancient shore.
 The vine that once the grape of wisdom bore
 Lay half decayed. The sun of truth was paled
 By clouds of ignorance and tantric rite,
 Perverted customs had enslaved the race,
 While superstition took pure reason's place,
 And held tyrannic sway with cruel might
 When from Himalayan heights a giant came
 Whose mighty brow shone with the light of day
 He pierced the midnight gloom with wisdom's ray
 Bearing aloft the torch of Vedic flame,
 Truth's echo throbbed and stirred the sleeping land
 Where spoke the thunder voice of Dayananda.

I have every hope that under the able guidance of Dr. Satyaketu,
 the editorial team of the Vedic Path will succeed in moulding it into an
 instrument for the advancement of knowledge and practice of the
 vedic way of life in all corners of the world as envisaged by its found-
 ing fathers, and thus cover itself as well as the Gurukula Kangri with
 added lustre.

Gurukula Kangri Vishwavidyalaya
 Haridwar.

G. B. Kumar Hooja

Dated : 10th April, 1977

The Message from

Shri Raghuvir Singh Shastri

Acharya and Pro-Vice-Chancellor

Gurukula Kangri Vishwavidyalaya, Hardwar.

The resuscitation of the *Vedic Magazine* in the form of *The Vedic Path*, I am sure, will make a significant contribution to the field of Vedic Research and Indological Studies. It is hoped that it will infuse Catholicity of outlook and regeneration of spirit among its readers.

The Vedic Path is the main organ of this university to the natives and non-natives. It is the voice of Swami Shraddhanand, and it becomes much more living on this occasion of his *Balidan-Parva*.

The Chief Editor, Dr. Satyaketu Vidyalkar and the editors Dr. H. G. Singh and Dr. R. L. Varshney and others deserve congratulations on bringing out this issue within such a short period. I wish *The Vedic Path* all the success.

G. K. Vishwavidyalaya
Hardwar
10th April, 1977

Raghuvir Singh Shastri

EDITORIAL

The Vedic Path, which is the reincarnation of the erstwhile *Vedic Magazine*, an internationally known journal of Gurukula Kangri Vishwavidyalaya, is before its readers once again. It tries to project before the world some insights on the Vedic and Indological research, and aims at educational, religious, national and international harmony and integrity. It believes that the Vedas are the fountain of all knowledge, and have a great relevance to the modern era. This journal was started, to quote the opinion of its founder, the late Prof. Gurudutta, "to meet the needs of the ever-increasing interest in the Vedas..., to picture the interior truths of Vedic Philosophy , to present the philanthropic or benevolent religion of the Vedas , to attack time-honoured and ignorance-begotten superstitions. . . . , to remove the wilful misinterpretations"

Knowledge not related to life, intelligence without character, shallow materialism without the depth of the spirit are not the answers to the problems being faced by the world to-day. The real answer lies in combining the fruition of knowledge with the health and happiness and character of the being. *The Vedic Path* is a small step in this direction.

The Vedas reflect a most wonderful feeling for the whole, the entire, the complete. Integrity is the very basis of their perceptions. All life is seen as a unity. Religious life and secular life are not divided. Matter and spirit are felt as an ultimate unity. Harmony and infinity are the sole perceptions of the Vedas. And the *Vedic Path* is an affirmation to follow that path.

Our path was obstructed by the stones and thorns of time. Thanks to God, they have been removed by our learned Vice-Chancellor, Shri Balbhadra Kumar Hooja to a great extent.

We are thankful to our contributors who very kindly contributed their articles. We could not publish all the articles we received, because we had certain limitations of our own. But this is in no way a reflection on the quality of the articles not published.

We are highly grateful to Dr. Hari Prakash, Manager, Gurukula Kangri Pharmacy, who so very kindly took personal interest to see this issue through the press forthwith. Without his co-operation, it would have been impossible to bring it out in time. Thanks are also due to Shri S. C. Vaishnava, Manager, Gurukula Kangri Printing Press and his staff who so industriously and urgently helped us in bringing the journal out at such a short notice.

The Nectar of the Vedas

I. The Holy Gayatri Mantra



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ओं भूर्भुवः स्वः ।

तत्सवितुर्वरेण्यं भर्गो देवस्य धीमहि ।

धियो यो नः प्रचोदयात् ॥

यजु० ३६-३

We meditate upon the glory
 Of the Omnipresent Lord;
 Who is blissful source of peace
 And the Omnipotent God;
 Who knows every thing that happens
 In this world and beyond;
 Who pervades the deepest ocean
 And is present in the pond;
 Who is killer of all misery;
 Sin and ignorance and grief;
 The Creator of the world
 Is un-paralleled to be brief;
 May the Lord inspire our actions
 May He give us wisdom;
 Being enlightened always
 May we manifest on earth His kingdom.

II. From Darkness to Light

ओं ज्योतिर्वृणीत तमसो विजानन्नारे स्याम दुरितादभीके ।

इमा गिरः सोमपाः सोमवृद्ध जुषस्वेन्द्र पुरुषतमस्य कारोः ॥

ऋ० ३-३६-७

A wiseman should choose light from darkness;
 Let us be away from misery and meanness;
 O soul, protector of Divine Bliss;
 Listen to the Divine words and don't miss;
 These are God's words who is the Best;
 Creator of the world and Greatest.

Metrically translated by—

Swami Dharmananda Saraswati, Vidyamartand

(President World Vedic Council)

Anand Kutir, Jwalapur.

The Collaboration between East and West at the Deepest Level

Dr. Indra Sen

Sri Aurobindo Ashram, Pondicherry.

INTRODUCTORY

The preliminary document of 'The World Conference on Scientific Yoga', held in India some time back, makes an interesting reading. Indeed, a synthesis is needed between the Western scientific civilisation and the spiritual experience of India and mankind as a whole. Our contemporary life has its own values, real and true, and yet they strike us as inadequate. Spiritual experience and its values have their attraction for the Indian mind in a special and a persistent manner. These two sets of values are not inherently contradictory, but entirely reconcilable. A reconciliation between them is, therefore, necessary in the interests of a fuller satisfaction of the human personality.

The concept of Scientific Yoga too is a happy one. Yoga is an approach and a pursuit of spiritual values and each age and each cultural epoch must have its own approach. The contemporary period is largely determined by science and, therefore, a Yoga which takes due cognisance of the contemporary personality and the science-created civilisation and undertakes to lead such a personality in such a situation of life is really the need of the times. And a science sobered by its long experience and aware of its limitations and of the possible things beyond its phenomenal sphere is a circumstance favourable to the growth of scientific yoga and the enlargement and reorientation of science itself in a view of a higher and a spiritual reality in the universe over and above the panorama of nature.

The time now, therefore, appears to be ripe for a conscious collaboration between East and West and for making a practical attempt at a synthesization of the contemporary science and technology of the West with the traditional spiritual experience and values of the East.

A pilgrimage to India of devoted person of science and spirituality in search of a reconciling and an illuminating truth for the deepest discords of contemporary life was overwhelming by its sincerity and humility. May it evoke the right response here and may the attempt lead to a systematic collaboration between East and West at the deepest levels of life and lead us all to the discovery and enjoyment of inner unities of life and a conquest of the inner distances which harass man so acutely to day.

WESTERN CONTEMPORARY LIFE CLEARLY MOVING TOWARDS SPIRITUALITY

Western science, philosophy, literature and life have in recent decades developed some most interesting new trends which clearly point to spiritual realities in personality and universal existence. We might contemplate a little these happy indications.

(1) The rise of psychology and its wide influence on many other sciences, literature and general life including management of war and peace and diplomatic relations is the most important trend to recognise and appreciate. With this the emphasis shifts from external physical nature and physical circumstances to man and his inner situation. This, one might say, is the first approach of science to the pursuit of self-knowledge.

And, in psychology, in Freud a strong attempt was made to investigate the unconscious motivations and in Jung a large and a penetrating approach led to the affirmation of a 'Centre' in personality beyond all dualities. Integration of personality became with him a powerful idea which has now gripped life widely.

The psychological way and view of life is, indeed, a precursor of spirituality. It has just to become progressively deeper, as it must in its own pursuit and it is bound to come to the basic reality of the conscious soul and recognise its commanding, unifying and essentially satisfying truth.

(2) Contemporary physics through its analysis of the atom affirms energy as the basis of the apparent physical existence and some physicists affirm 'Will' as the ultimate existence. A unitary ultimate will in the universe is a most interesting affirmation of science

Physics as the pioneering science at the moment shows how all science must exceed itself. Biology in regard to its theory of evolution in the hands of Julian Huxley has been led to the affirmation that with man evolution must become a conscious pursuit of increasing awareness. And what is Yoga if not a deliberate attempt at widening and and heightening of consciousness.

(3) Space exploration is the spearhead of all science today. It is the boldest attempt of science at new conquests of nature and it has so much highlighted the need of training in the control of one's body and mind. Science thus for its own needs makes a contact with Yoga.

(4) The turning towards the future, trying new possibilities and new solutions on the one hand and a disappointment with the past and a conscious disavowal of it are highly important new trends in Western life.

The second world war ended in 1945 but a state of crisis continued and is calling for a change. The basic cause has not yet been found and life, therefore, continues in uncertainty dissatisfied with the standards of the past and groping for new possibilities and new solutions. But this persistent turning towards the new and the possible implies, however vague and confused, faith and hope which are distinctive spiritual attitudes. It is also the essential pre-requisite for a new creation in life.

(5) The idea of wholeness has been a new trend in many fields of science and philosophy. This has particularly shown the limitations of the analytical approach of mind and emphasised the synthetic cognitive functions. All this too is important from the spiritual point of view.

(6) 'The Phenomenon of Man' by Teilhard de Chard in has been truly a phenomenon in contemporary times. The author has shown on the basis of biological facts that man should hope for new great possibilities of life by increasing his knowledge and his love. The course of future evolution has to be psychological and immense growth lies ahead of us.

(7) Bergson's 'intuition' and its concept of man's responsibilities and possibilities for the future are also striking developments.

(8) The recent Western response to Yoga is a widespread phenomenon and it implies a great deal. But the real needs should be rightly understood and appreciated and Yoga duly adapted to minister to those needs and not just mechanically offered.

(9) There are besides these many more tendencies which are highly interesting as indications of new lines of growth in the West.

INDIAN LIFE REORIENTING APPROACHES TO SPIRITUALITY AND ACCEPTING SCIENCE AND TECHNOLOGY.

Indian life since Independence has sought to guide and direct itself in a conscious manner, howso handicapped by the general conditions of contemporary world in which independent self-guidance is practically impossible for most nations. There is a wide and a large acceptance of Science and Technology and there is a sincere attempt to recover and recreate spiritual values in contemporary life. However, a large country and a big nation, with a rich variety and a long tradition of life, must needs take time to come to its own. But the wonder of Indian life is that here spiritual attitudes and values could be achieved at the mass level and the masses have enjoyed the benefit of these attitudes and values over the centuries and in all the ups and downs of a long history.

All the great personalities of Indian renaissance, Raja Ram Mohan Roy, Swami Dayanand, Tagore, Tilak, Gandhi and othes have in one

way or the other recreated moral and spiritual values and reinvigorated them. Sri Aurobindo, however, had a special calling for Yoga and he intensively bestowed his energies on recreating it for the contemporary life and its future possibilities. Quite in the first decade of the century he said, "... it is to make yoga the ideal of human life that India rises to-day." And his systematic work on yoga called "The Synthesis of Yoga" is his great creation and the best contribution to contemporary life. The same has been the basis of a wide yogic practice at his Ashram in Pondicherry by men, women, young people and children drawn from all over India and from many other nationalities.

All this stands so closely related to what inspired this world conference of Yoga. May this work at recreating Yoga afford the best satisfaction that it can to seeking personalities coming to India a yogic pilgrimage.

Spiritual attitudes and experiences as they continue in Indian tradition are naturally embedded in conventions of Indian life and a good thing more easily tempts falsifications too. To see and recognise the spiritual element in life is a matter of keen discrimination and to do so in new conventions of life is rather difficult. But some detachment, a faith and a reliance on a Higher Governance, a plasticity and adaptability to circumstances, a non-insistence on self-will, a responsiveness to truth, a goodness of nature and temperament, an equality of mind, a willingness to help and forego one's own pleasure are some indications of some spiritual feeling in a person. And it is always a pleasure to see and recognise these anywhere.

HOW WESTERN SCIENCE AND PSYCHOLOGY MAY FURTHER FACILITATE THE RECONCILIATION

Science arose in the West in the 16th century in a spirit of reaction against religion and in an exclusive sort of assertion that the external physical nature is the only reality and that man's mind is the only instrument of investigation. Today science is in a much better position than it was then. It is very conscious of its precise strength as well as limitations. It would be so helpful for a larger and a wider progress, if it now clearly re-formulated its basic standpoint in view of the present cultural situation and our present state of knowledge.

Psychology, in particular, might reconsider its standpoint. Its commitment to being a natural science and limited in its investigation to the phenomenon of mind create serious difficulties for itself in its pursuit of acquiring satisfactory knowledge of personality and self. The situation that has resulted is stated by Gardner Murphy, an eminent contemporary psychologist, as one in which we know a lot

about personality but almost nothing of personality. This is evidently an unfortunate position.

The Western scheme of limiting investigation to phenomenon and dividing phenomenon into distinct spheres and entrusting each sphere to a science has its convenience and advantage. This is the approach of the analytical mind. But it has its limitation too. It compromises our basic approach to truth, which should be unconditional. Psychology, for example, insists on being a "psychology without a soul", but then it lands itself in a situation of knowing a great deal of the reactions of personality and knowing nothing of personality itself. Our commitment should be to truth, whole and entire and all other arrangements of the division of fields of knowledge and methodology should be subordinated to it. We should keep alive before us the facts of unity of existence and unity of knowledge and aim at an integral knowledge of man and objective existence, phenomenal and ultimate, whether pursued by an objective approach or a subjective approach, analytically or synthetically or in both ways.

The insistence on phenomenon and rejection of ultimate reality was also a reaction against speculative metaphysics. But an approach of experience is really the approach of Yoga to Soul and God. Yoga is not interested in speculation about the basic realities. It seeks them as facts of experience. It in fact discourages speculation about them as that handicaps the approach of experience. This approach of experience of yoga is the same as that of science. But science limits itself to sense experience, whereas Yoga accepts experience and consciousness as the basic fact and seeks by training to enlarge it, deepen it and heighten it and thereby extend its sphere of observation and knowledge. Yoga, in fact, does it so whole-heartedly that it does not attach much value to inferential knowledge.

The approach of experience is a most valuable sympathetic contact between Yoga and Science and admits of an easy enlargement and that could facilitate a synthesis and reconciliation between science and spirituality and create a new prospect and a fresh line of growth for the future to our entire contemporary life.

Perhaps the most important re-adjustment that would facilitate the desired synthesis and reconciliation is the admission in the general cultural life of the West that mind and thinking are not the highest and ultimate faculties available to man. Unfortunately, in recent centuries, science and philosophy in the West have collaborated in affirming mind as the man. That man is the soul and that soul is a distinct fact besides the mind have not been unknown to Europe. But now a tradition of much force and stability has been built up all in favour of the mind.

This militates against a seeking for the soul and its unifying and harmonising action rather strongly. A re-awakening and strengthening of the spiritual and the religious tradition of Europe would much help a collaboration between East and West in a wider field.

HOW INDIA AND YOGA MAY RE-ADJUST THEMSELVES AND FURTHER FACILITATE THE RECONCILIATION

Naturally a re-adjustment on the part of India and Yoga in view of contemporary situation is called for and, if large-mindedly pursued, it would much promote the spiritual orientation and a reconciliation between science and spirituality as also between East and West. India has carried on a persistent research in the field of spiritual experience, as is evidenced by the numberless spiritual approaches and lines of Sadhana (Yogic Practice) present in Indian life and it is necessary that India should take a fresh approach to the problem of spiritual life in the contemporary situation. But to be able to do so India must rise above its traditions and traditional forms, however valuable in past they might have been, take spirituality essentially and attempt its realisation in present-day life. But this is by no means an easy task. We get attached to forms and begin to take them for the substance and we have long been largely traditional and not creative in our life. Therefore, a deliberate intention and a strong effort is needed to rise above tradition and take a fresh approach to life.

Besides this, we need to take a similar fresh approach to science and technology, which we are seeking to take over from the West. Is it necessary for us to take science along with its spirit of reaction to religion and philosophy? Can we not take it and accord it a proper place in our scheme of cultural history. In India, an antagonism between science, religion and philosophy does not seem to have existed.

This again is not an easy task. It requires great discrimination. But the beneficial effects will be enormous. The country would be spared the consequences that have followed industrialisation in Europe. And such revaluation of science and technology could be a new experience for the world as a whole.

AN ORIENTATION FOR THE FUTURE

The talk of reconciliation of science and spirituality and that of collaboration between East and West are really things of relative justification. Science and spirituality as also East and West are factors of our common world situation and are shared by us all more or less. The real problem is for the individuals who are acutely conscious of responsiveness to science as well as spirituality and feel a discord

within themselves to achieve a unification in their experience and make that reconciliation and synthesis a vivid and a concrete reality. Then those individuals will become radiating centres of a new orientation for the future for the world as a whole. A harmonisation or integration of certain diversities or excesses in the make-up of personalities is needed and we have to realise such a wholesome personality. That is what has to be sought and realised and it must naturally be done by those who have become conscious of it. Such harmonisation achieved in a few will set a new pace in our general life. This really requires a vision of the future, of the shape of the things to come and a whole-hearted pursuit of the same. That is what is most favourable to the realisation of the objective. The consciousness of the diversity and opposition has to be present in a subordinate role – the primary concentration being on the unity in view.

The objective approach of viewing the world outside of us and observing its discords and seeking their reconciliation is also a consideration which should lead to the achievement of unification in men's inner life. The outer is an expression of the inner, not its determinant. We very much tend to make it the determinant under the pressure of our outward gaze and that impairs the effort to effectuate the change where it is needed.

If we remain involved in oppositions then the attempt to reconcile them becomes self-defeating. The unification and harmonisation does not become a reality. And it is obviously wrong to identify spirituality with India and science with the West. They are factors of human civilisation and their reconciliation is a general human problem available for general human benefit. Individuals and nations become associated with the issues in varying degrees, a little more or little less or in one form or the other. But that is all secondary. The general human level and context is what is important.

We hope that science, spirituality, yoga and the rest of the issues of life and civilisation would come to be viewed and pursued more and more in view of the unity, the harmonisation, the progressive perfection of human living as such. And that is truly the most effective way of pursuing and realising them too.

This article appearing in the Vedic Path might conclude on a note that Swami Dayananda had a large dimension of Yoga in his personality and that the Rishi of Yore, the true founders of Indian culture, were essentially seers, Satya-Drashta, possessed of the vision of truth. A thinking personality is a different quality, Swami Dayananda presented to modern India a glowing image of the Rishi personality. Let us ponder over what the essential quality of the personality

of the Rishi is. What depth and integration it would possess ? What certitude regarding truth it would command and how wonderfully creative it could be. We much talk of the ills of contemporary life and relate it to the split personality of man. Is the integration of the Rishi personality really not the solution of all our present-day problems. And did Swami Dayananda not above other things seek that ?

Man hungers and thirsts not only for bread but for the bread of eternal life, for truth, beauty, goodness and holiness. To achieve harmony is the aim of his existence.

—S. Radhakrishnan.

SWAMI DAYANAND SARASWATI

**A Reformer & Progressive Thinker of the
Nineteenth Century.**

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Swami Dayanand Saraswati (1824-1883) was one of the most prominent leaders of Indian renaissance, that began early in the nineteenth century. He was not only a reformer who initiated a powerful movement to regenerate India's society and religion, but also a progressive thinker. He was a contemporary of Karl Marx (1818-1878), and it is a remarkable fact that though he did not get any opportunity of coming into contact with the progressive thought of the West, he propounded some doctrines which are very near to the socialist ideology. Dayanand was the first Indian, who propagated the principles like "equal opportunity to all" and "equality of all human beings" in the modern age. He was a profound Sanskrit scholar but had no English education. His teachings were not influenced by the ideas associated with the West. Whatever he preached was the result either of his own original thinking or of his rational and new interpretation of the Vedas and other ancient Hindu scriptures.

The nineteenth century was in certain respects a memorable epoch in India's long history. It first saw the completion of the country's subjugation by the British imperialists. The efforts of the British in India were directed not only at political domination and economic exploitation, but also at the enslavement of the people mentally and culturally. That is why they introduced their own language as medium of instruction, completely ignored India's own literature in the curriculum of studies and tried their best to prevent the growth of Indian languages. This policy paid the British imperialists handsome dividends. Indian youth educated in schools and colleges established by the British began to look down upon every thing that was Indian, and had no hesitation in considering every thing British superior. Even the great reformers like Raja Rammohan Rai (1772-1833) and Mahadev Gobind Ranade took their inspiration from the West. To a large extent, their reforming activities were influenced by their English education and their contact with Western rationalism. It was due to this fact that their influence remained limited to a few upper class intellectuals and they could not bring any remarkable change in the belief, customs and practice of the Indian masses as a whole.

But far different in character was the reforming movement initiated by Dayanand, who took his inspiration from India's past, and who preached his doctrines in a manner that could be accepted by the people more easily. He was successful in starting a mass movement for reform, and his influence did not remain limited to the intellectual elite alone. That is why his teachings took firm root in several parts of India, and a large number of people—even the illiterate peasantry being among them—became his followers. To continue his work of regenerating India, he founded an organisation under the name of "Arya Samaj" which now claims millions as regular members, while a much larger number of people can be safely counted as its sympathisers and followers. Unlike other religious establishments of the Hindus, Arya Samaj is a democratic institution with a regular membership and having its primary units not only all over India but also over those overseas territories where Indians are settled in large numbers. In addition to its primary units Arya Samaj has its provincial, all-India and international organisations also, all the office bearers of primary as well as higher units being appointed by regular elections. The constitution of Arya Samaj was framed by Swami Dayanand himself, when he established the first unit of Arya Samaj at Bombay in the year 1875, at a time when no democratic institutions were to be found in India. The country at that time was under the autocratic rule of the British and the system of electing members to the central or provincial councils was totally unknown. Even the municipalities established by the British in some of the larger towns had no elected members at that time. The constitution of Arya Samaj as framed by Dayanand required every primary unit to elect delegates to the provincial unit and the provincial units to elect their representatives to the all-India organisation. All this was done by Dayanand at a time when the other religious establishment of the Hindus had either hereditary heads or the head had the privilege to nominate his successor.

Dayanand was born in a Brahman (priest) family of Kathiawar and his father wished him to follow the orthodox ways of his family. But the inquisitive mind of young Dayanand was not satisfied with the conservative customs and beliefs of his times. He left his home at an early age, wandered all over India in search of truth and studied Vedas and other ancient Hindu scriptures in original. This study convinced him that most of the practices and beliefs of his time represented a form of Hinduism that was corrupt and not in accordance with the true teachings of the Vedas. So he raised his powerful voice against the evils that had crept in Hindu society. His view was that caste system was wrong. The status of a person should not depend on his birth or

lineage, but on his education and worth. The four Varnas of the Hindu society do not indicate any watertight castes. In reality, they represent four classes. All those persons who are engaged in intellectual pursuits and educational activities should be considered to be Brahmanas irrespective of their birth. Military and administrative personnel are to be termed Kshatriyas. Persons engaged in business and industry should be known as Vaishyas and people doing manual labour should be classed as Shudras. This was a novel interpretation of the old caste system. Untouchability had no place in the social order of Swami Dayanand. That is why many educated persons belonging to the so-called untouchable classes were given the status of priests and preachers by the Arya Samaj. Some establishments of the followers of Dayanand did not hesitate even in employing persons of sweeper caste as cooks, medical assistants and also as teachers. It was a great revolutionary step in regenerating Hindu society and Arya Samaj was successful in eradicating the evils of caste system to a considerable extent. Dayanand believed in equality of all human beings. In his eyes nobody was high or low. He also opened the doors of Hinduism to all. By doing so he expected to realise the ideal of unifying India nationally, socially and religiously.

Among his reforming activities mention may be made of his efforts for female education and widow remarriage. He preached that women should be treated as equals of men. The old dictum that "women and shudras should not be educated" was wrong. Women should get full opportunity of education and thus acquire their rightful place in society, Child marriage must be prohibited and the marriages should not be arranged by the parents but should be based on mutual choice and love.

Dayanand also realised the truth that a vast country like India must have a common language. According to him Hindi was the only language that could serve this purpose. His own mother tongue was Gujrati, but he learnt Hindi and wrote all his books in that language. He was the first man who developed a chaste and easy style of Hindi prose. Before him Hindi was used either for poetry or for writing simple stories only. But he wrote voluminous books—some of them containing as many as 700 pages in chaste Hindi and gave this language the status of the 'national language'. His most important book is known as Satyarth Prakash, which means 'Light of Truth'. It contains his views not only on religion but also on statecraft, education, social organisation and philosophy – Dayanand also was the first man who translated the sacred Vedas into Hindi and thus made them available

to the ordinary people. Upto now this literature could be studied only by those who were scholars of Sanskrit.

No doubt, Dayanand was a great reformer and he proved to be a dynamic force in regenerating Hindu religion and society, but he was also a progressive thinker and some of his views are really remarkable. While propounding his views on education he wrote that "it is the chief duty of the parents, teachers and relatives to decorate their wards with the ornaments of superior education, good training, excellent qualities, actions and habits. The mind or soul of a man cannot be beautified by the wearing ornaments of gold, silver, precious stones, pearls, diamonds etc., as the wearing of ornaments leads only to physical vanity, sensuality, fear of thieves and possibility of death also". And thus education should not be the privilege of the selected few. Education must be given to all." There should be a law of the state and a custom of society that no man could keep his son or daughter at home beyond the age of five or eight years. They must send them to a residential school. And if they do not, they should be punished". While in a residential school, "all should get the same kinds of clothes, food and beddings, whether they be princesses or of poor families. They should all live a life of austerity." What more clear exposition of the doctrine of "equal opportunity to all" can be possible. According to the scheme of Swami Dayanand every one is to get equal opportunity to receive education and develop his inner qualities. Education was to be compulsory and life in schools was to be the same for everybody irrespective of the status of his or her parents. The duty to impart education under equal and similar conditions to every one was to be that of the state "The state is to see and arrange that girls and boys both have to receive education from such age. Nobody should be allowed under state regulations to keep his daughter and son at home after the age of eight years. They must be sent to the residential schools and should not be allowed to marry before the completion of education."

The earliest age for marriage according to Dayanand is 25 years for boys and 16 years for the girls. He wished the help of state power not to allow any one to marry before this age. The period from five or eight years to 25 years in case of boys and upto 16 in case of girls was compulsorily spent in residential schools, where they were not to be permitted to come into contact with their parents. They had to regard teacher as their father and mother, whose duty was to develop the inner qualities of their wards. The parents are not supposed to bear the expenses of the education of their children. State and society must support every child, while he or she is receiving education

in a residential school. So the entire education is to be free and compulsory, children losing all contacts with their parents after completing the age of 5 or 8 at the latest.

So it is the first stage in building a socialist society which according to Dayanand requires not only the sanction of public opinion but also the use of state power. But Dayanand realised that equal opportunity to acquire education was not enough to build a society based on justice and equal opportunity. It was possible that after receiving education one may go to his princely home and enjoy all the comforts and privileges of a rich family, while the other may go back to his pauper family and may be forced to wage a relentless struggle for existence without regard to his capabilities and work. So Dayanand ordained that the teachers of the residential schools under whose charge the boys and girls were required to spend their period of education were to decide what was the real worth of their words and to which class (intellectuals, administrators and military men, business men and industrialists and manual labourers) of society they were to belong. For this very important purpose Vidya Sabha (council of the learned) should be organised and this sabha is to decide what status or work is to be entrusted to an individual. So under the scheme of things ordained by Dayanand, individuals have no choice or freedom in deciding their career or status in life. If the teachers or the council of the learned found that a boy belonging to a rich industrialist family was capable of becoming only a manual labourer, he had no right to the property of his father but had to work as decided by his teachers. So the status or work of a person was not to be hereditary, but was to be decided by the teachers according to his work and aptitude.

Dayanand has nothing to say about the socialisation of the means of production or about collectivism. Perhaps the problem of private property never came before him. Being a Sanskrit scholar and philosopher, he was mainly concerned with regenerating Hinduism and raising the voice against the evils of Hindu society. But he was not blind to the more important problems of social justice and that is why he put forward a solution which is certainly very original. He was not against inheritance of property, but 'who should inherit whom' was to be decided by the teachers who had been in close contact with their pupils and were in a position to decide whether a person was capable of managing and utilising the property of his parents in a manner that may be for the good of society. Thus the inheritance was not to be necessarily from father to son. The council of the learned teachers should have the right to decide who should inherit whose property and who

should be allotted to whom as a son to continue his work. Thus the right to property and the inheritance was not to be absolute.

This scheme of allotting work and status to individuals by the Council of the Learned and also their right to decide who should inherit whom evoked a question to Dayanand. "If a man has only one son or daughter and that one happens to join another varna (class or status), then who will attend to the needs of the parents. It will mean the end of family also. What arrangement you suggest in such cases ?" To this the answer of Dayanand is "Neither there will be lack of attendance or loss of family, as they will get in exchange of their sons and daughters suitable heirs by the decision of the council of the learned and the state organisation." What a novel and original suggestion is this to solve the problem of social justice ! One is to inherit property only if he is capable of managing and using it to the good of society. The right to belong to the family of one's own parents and continue their work by inheriting their property or work was not to be absolute. In his own way, Dayanand raised his voice against individualism & tried to make all subject to the control of society. Of course, Dayanand could not think of a classless society, but the classes that he envisaged were to depend not on birth or inheritance but on ones' own work & capacity.

Dayanand was also a nationalist and patriot. His views on national freedom, democracy and patriotism are worth quoting. He expressed his devotion to his motherland in the following words: "In the whole world there is no country like India. That is why it is called the land of gold . . . whatever countries there are in the world, they all praise this land and cherish hopes from it. The philosopher's stone, which we hear so much about, is only a myth. But the veritable philosopher's stone in India, by whose mere touch the iron of foreigners' poverty is converted into the gold of their prosperity." Dayanand has depicted a glorious picture of India's past, when she was the leader of all the civilised world, when her sons to other countries with a message of culture and religion and when many other lands including the Americans followed her lead. Then he visualizes the cause of India's downfall in the following words: "It is a natural law that when riches increase beyond measure, there increase with them idleness, inactivity, jealousy, hatred, sensuality and pride. Education and culture receive a setback, evil qualities and pernicious habits grow more and more." According to Dayanand this very process took place in India after the battle of Mahabharata and caused her downfall. To quote Dayanand again, "when men of great learning . . . were killed in the Great War . . . jealousy, enmity and pride became the order of the day. India was split up into small pieces . . . where even the

Brahmanas went without education, the condition of others became unspeakable.

According to Dayanand, "the causes of foreign domination in India are such evils as mutual discard, diversity of faith, want of education, early and enforced marriage, sensual indulgence, bad habits such as falsehood and absence of Vedic knowledge. When brothers fight among themselves, the foreigner forces himself in and becomes the arbitrator Nobody knows when this demon of discard will quit us." What a correct and sensible diagnosis of India's downfall. Dayanand keenly felt the subjugation of his motherland by the British and inspired Shyamaji Krishna Verma, one of his pupils to organise the first revolutionary party in India. Some historians have suggested that he took active part in the war of Liberation of 1857 and retreated to the desert states of Rajputana when this first effort of revolt against the British failed.

Undoubtedly, Dayanand was the first in India who used the term 'swaraj' which was later on adopted by the Indian National Congress as the goal of India's freedom movement. He asserted that "good government can never be a substitute of self-government" and foreign rule though it may be as good as the rule of father over his children, can never be desirable.

Dayanand gave much emphasis to the past glory of India and went even to the extent of claiming that all the scientific truths and new inventions were known to the Indians in ancient times. This may not be acceptable to modern scholars, but it certainly served the purpose of removing the inferiority complex that was rapidly enveloping young Indians due to the English education and British ascendancy.

One full chapter has been devoted to the state and its government in Dayanand's famous book "Satyarth Prakash." It follows the line of Manusmriti and other ancient books on Polity. But Dayanand has given new intepretation to the old texts and has not hesitated to add his own views at several places. 'Raja' of the old books does not mean an hereditary kind to him. This term has been interpreted as Sabhapati 'President of the Council' by Dayanand. Explaining text from the Vedas, he so expresses his views "The object in view is that one man should not possess the absolute power of government. Let the Raja be the president of the council, the council under him and he under the council, he and the council both under the people. "At another place we find the following remark "It is true fact that working people like the peasants are kings of kings and the raja is only their protector. Just imagine a Sanskrit scholar absolutely ignorant of his contemporary western socialist ideology giving so much importance to the labouring

class as claiming them to be the kings of kings. The governmental organisation as envisaged by Dayanand required establishment of three councils, the Council of the learned, the Council of Justice and the Council of Administration, which were to be composed of efficient and learned persons. The rulers and officials were to be under the law and liable to be punished. Punishment was to be severe.

It is a pity that due attention has not been given to the progressive thought of Swami Dayanand in India or abroad. Arya Samaj established by him to continue his work has limited its activities to social reform and propagation of mono-theism and of authority of the Vedas. It has totally ignored his views about social justice and equal opportunity to all. To some extent Dayanand himself is responsible for this shortcoming of his followers. By emphasizing too much the final authority of the Vedas and by claiming that all his teachings were based on the ancient scriptures he himself put a serious obstacle to the growth of free thinking and rationalism. Like other orthodox creeds, the Arya Samaj also began to depend on a particular book to find out what was the truth. Such an attitude can never be helpful to progress and social reconstruction especially in dynamic times like ours. But this will have to be admitted that in Swami Dayanand the nineteenth century India produced a thinker who could see beyond his age and who tried to lead his country towards progress and freedom.

Seasonal Life of Birds in the Works of Kalidasa

(Period of Kalidasa disputable between 200 B. C. and 415 A. D.)

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INTRODUCTION

For a long time past it has been the general conception of the people that India had great astronomers, mathematicians and chemists, but no biologists (Mani 1955, Nordenskiöld 1929, 1933). It is because of the fact that the material lying hidden in our ancient Sanskrit literature has been little approached from a biological point of view. Husain (1938), Majumdar (1953) and Hora (1948, 1950, 1951) impressed upon the necessity of work in this direction but very little has as yet been done.

The great Sanskrit poet Kalidasa was a poet of nature. In his works nature appears to be displaying herself most vividly. Throughout his compositions his keen and acute power of observation of the animal and plant life is evident. Though expressed poetically, yet if interpreted scientifically, it will really be a useful contribution to the modern biology and also to the historical aspect of biology. The author (1957-1962) published seven papers on knowledge about birds and insects in the works of this poet. This paper is a further humble effort in the same direction.

KALIDASA'S WORK'S

The following are the seven works of Kalidasa from which material has been taken for the present paper :

1. Abhijnana Sakuntalam, abbreviated as Sak.
2. Vikramorvasiyam, abbreviated as Vik.
3. Malavikagnimitram, abbreviated as Mal.
4. Raghuvamsam abbreviated as Raghu.
5. Meghadutam consists of two parts :
 - (a) Purva Megha abbreviated as M. P.
 - (b) Uttara Megha abbreviated as M. U.
6. Kumarasambhavam abbreviated as Ku.
7. Rtusamhara abbreviated as Rtu.

The first three are plays and the remaining four are epics and short lyrical poems.

SEASONS IN INDIA ACCORDING TO KALIDASA

Upadhyaya (1947) mentions six seasons as follows :

1. Nidagha Kala, the hot season consisting of the Jyestha and Asadha, corresponding roughly to June and July.
2. Varsa Kala, the rainy season consisting of the months of Sravana and Bhadrapada, corresponding roughly to August and September.
3. Sarat, the autumn season, the months of Asvin and Kartika, running roughly over October and November.
4. Hemanta, the cold season, the months of Margasirsa and Pause, corresponding roughly to those of December and January.
5. Sisira, the cool or dewy season, comprises the months of Magha and Phalguna, corresponding roughly to February and March.
6. Vasanta, the spring season, the months of Chaitra and Vaishakha corresponding roughly to April and May.

BIRDS AND THE SEASONS

References of the relevant verses from the works of Kalidasa will now be mentioned and dealt with seasonwise in order to appreciate and evaluate scientifically the knowledge Kalidasa had about the effect of seasons on the life of certain birds.

NIDAGHA KALA, THE HOT SEASON

Verses : Raghu XVI-14, 54, 56; Rtu. I-13, 16, 19, 23; Vik. II-22; Mal. II-12.

DISCUSSION

Bird life in this season has been described as dull, and small birds sitting on naked trees have been shown to be panting for breath (Rtu I-23).

The forest fires so common in the summer burn the tails of the peacocks, and the tailless peacocks are unable to dance or enter into any other entertainment (Raghu. VI-14). Scorched by the severe heat of the summer sun, the peacocks become dull both physically and mentally and so inactive that they do not even hurt their deadly enemies the snakes when the latter come to take shelter of shade under the peacocks' tails (Rtu. I-13, 16). The summer noon so oppresses a peacock that it sits down silent in the cool basin around the root of a tree (Vik. II-22). Thirsty in the midday heat the peacocks run for drops of water wherever available and in verse Mal. II-12 they have been shown to be drinking the drops of water flung out from a revolving water wheel.

The karandava leaves the heated water of the pond and comes to the bank to take shelter there under the leaves of lotus (Vik. II-22). Pandit (1947) has identified this bird as a species of wild ducks, the *Nettapus coromendelianus* (Gmelin), commonly known as the cotton teal.

The encaged parrot in the pleasure house, feeling exhausted under the effect of heat has been described as begging for water (Vik. II-22).

The pigeons feel the effect of the heat of the midday sun in that they shun their ordinary haunting places, the sloping roofs which have become intolerably hot for them (Mal. II-12).

The sarus cranes have been shown to be present in the lakes or ponds in this season (Rtu. I-19).

Verses Raghu. XVI-54 and 56 regard rajahamsas and hamsas as sex-intoxicated and swimming for pleasure in the waves of Saryu river in the summer season. Verse Mal. II-12 describes the effect of midday heat upon the hamsas which take rest in the shades of the leaves of lotus plants in artificial lakes with their eyes half-closed, probably due to the eyes being dazzled by the glaring heat. Gupta (1962) has identified rajahamsas and hamsas as different species or breeds of a goose.

VARSA KALA, THE RAINY SEASON

Verses :

Raghu. I-39, VI-9,51, VII-69, XIII-27, XVI-14,64, XVII-15, 60; Ku. VI-27, VII-39, XIV-35, XVII-27, 36; M. P. 10,11,22,23,24, 25,33,86 48,61; M. U. 57; Rtu. II-3,6,14,16; Vik. IV-30,31.

DISCUSSION

In this season the peafowls are mostly active and happy. They enter into courtship, sex play, dancing and music. Peacocks sing at the approach of clouds and rains (Raghu. VII-69, XIII-27; M. P. 24). Any sound like that of the roaring of clouds can make them sing even if the actual clouds and rains are not there. In verse Raghu. I-39, a rattle of chariot wheels arouses them to sing. In Raghu. XVI-64, the sound of water in the form of labour is the stimulus though the season is summer. The sight and roar of clouds are proper stimuli also for dancing (Raghu. VI-51; Ku. XIV-35; M. P. 36, 48; Rtu. II-6, 14, 16). Peacocks can be stimulated to dance by any sound like that of clouds. In verse Raghu. VI-9, the sounds of trumpet and conches and in Raghu. XVI-14, the sound of water in the form of labour, have been described to be those sounding like the roar of clouds and stimulating the peacocks to dance. In Ku. XIV-35,

a dense dust in the sky bears the appearance of clouds, and the peacocks begin to dance when they see it. The actual process of courtship in the rainy season has been depicted in verse Rtu. II-6, in which the peacocks have been shown to be dancing in flocks by raising and spreading their plumage, thus clearly displaying their gorgeous ocellated trains. They have been referred to as embracing and kissing their mates, the females or peahens. Kalidasa's description of the life of peafowls in the rainy seasons agrees well with the description of the modern writers on birds according to whom the breeding season of peafowls is a prolonged one from January to October, the actual months varying locally and being dependent on the rains; the middle of June to the end of August is considered the usual period.

Rajahamsas are happy at the approach and roar of clouds (M. P. 11,25). They sing and prepare to migrate to Manasarovara at the approach of the rainy season (M. P. 11,25; Vik. IV-30,31). In verses Ku. XVII-27 and 36, hamsas are shown to be migrating from Sumeru mountain (near Kailasa) towards Manasarovara, while in verses M.P. 25,61 they are shown as accompanying the cloud somewhere from Central Indra (Ramagiri mountain) towards Kailasa. The phenomenon of migration in hamsas has been dealt with in detail by the author in his earlier paper (1962 a).

Sarus cranes have been shown as uttering their sweet songs, entering into courtship and becoming intoxicated in sex pleasure at the beginning of the rainy season (M. P. 33).

Rainy season is a season of activity and reproduction for the egrets (balakas) when they take pleasure in flying in rows or groups (Ku. VII-39; M. P. 10, 23). In M. P. 10 there is a definite indication that the female egrets are impregnated in this season. According to this verse, perhaps flying in groups in the sky is helpful in courtship which is a prelude to copulation and impregnation. According to Salim Ali (1955), the nesting season of egrets is June to August in Northern India, and November to March in the south and in Ceylon, varying according to monsoon conditions. Kalidasa's descriptions therefore agree well with those of the modern authors on birds.

Temples in the villages of Central India have been shown to be full of nests of crows beginning to build these nests in the rainy season (M. P. 25). According to Salim Ali (1955), the nesting time of the house crow *Corvus splendens* is principally from April to June. According to Dharmakumarsinhji, with special reference to the birds of Saurashtra, it is May to August and most of the eggs are laid during monsoon. Kalidasa is therefore nearly correct in saying that at the

beginning of the rains which sometimes set in even the month of June, the village temples are full of the nests of house crows.

The bird known as chataka or saranga is a kind of cuckoo and has been identified as *Cuculus melanoleucus* by Upadhyaya (1947) and as *Hierococyx varius* or the common hawk cuckoo or the brain fever bird by Pandit (1947). "According to ancient legend the chataka was said to subsist on rain drops which it gathered as alms from the clouds. The Sanskrit poets used to write of the chataka who would rather die of thirst than drink aught but the rain drops from the clouds as an instance of pride and self-respect (Pandit 1947). Kalidasa has shown this bird as hailing the cloud (Raghu. XVII-15) and hailing only those clouds which are full of water (Raghu. XVII-60). Thirsty chatakas pray for water from the clouds (Ku. VI-27; M.U.57; Rtu. II-3). Proud chataka, proud because it takes only that water which comes direct into its mouth from the cloud in the form of rain drops, has been shown to sing at the sight of the clouds as if praying for water (M.P. 10). Chataka has been described as being skillful enough in taking rain drops directly into its mouth (M.P. 22). According to modern authors on birds at least this much is a fact that this bird is silent during winter but becomes more and more vociferous as the hot season and then the rains advance.

SARAT, THE AUTUMN SEASON

Verses : Raghu. XIII-30,33; Rtu. III-8,11,12,13,16,17.

DISCUSSION

In this season the peacocks donot raise their heads towards the sky because there are no clouds (Rtu. III-12). They donot dance and donot enter into sex play (Rtu. III-13).

Hamsas are sex-intoxicated in autumn when they utter their sweet attractive songs (Rtu.III-8,11,13,16). Sexintoxicated hamsas wander in pairs in the ponds in this season (Rtu. III-11). In their intoxication they have surpassed the charming gaits of beautiful women (Rtu. III-17).

Sarus cranes are active and sex-intoxicated, and they enter into courtship as well as utter their sweet songs in this season (Raghu. XIII-30, 33; Rtu. III-8, 16).

Life of egrets is dull and they are lazy in autumn (Rtu. III-12).

Karandavas swim in rivers and waves of water clash against their faces (Rtu. III-8).

The observations of Kalidasa are in general agreement with the observations of modern ornithologists.

HEMANTA AND SISIRA, THE WINTERS.

Verses : Ku. V-26; Rtu. IV-8, 9, 18; Rtu. V-1.

DISCUSSION

Sex-intoxicated kadambas swim in the lakes which are full of blue lotus flowers (Rtu. IV-9). Kadamba is a kind of hamsa or goose - Gupta (1962 a).

The Kraunch birds are described as making noise in the rich rice fields (Rtu. IV-4, 18; Rtu. V-1). Pandit identifies this bird as *Anthropoides virgo* (Linnaeus), the Demoiselle crane at one place (Rtu. IV-8) and as *Numenius arquata* (Linnaeus), the curlew at another (Rtu. IV-18). Whatever the case may be, both these birds are winter visitors to India and it is only in this season that their calls are heard. Kalidasa is therefore correct in showing their presence in India only in the winter season.

The bird known as chakravaka in Sanskrit has been shown to get separated from its female the chakravaki in the wintry night of December and January at the Himalayas and being thus separated, the male and female are depicted to cry as if expressing an acute desire to meet (Ku. V-26). This bird has been identified as *Casarca ferruginea* (Vroeg), the brahminy duck or ruddy sheldrake - Salim Ali (1955) and Upadhyaya (1947). In Sanskrit literature a great love is indicated between the male and female. They are said to remain together during the day but get separated at night to meet again in the morning. The female when separated from the male is said to become sad.

VASANTA OR THE SPRING SEASON

Verses : Raghu. IX-27, 34, 43, 47 ; Ku. III-32, 37; Rtu. XVI-16, 23; Mal. IV-2.

DISCUSSION :

The first call of koel, *Eudynamis scolopaceus*, is heard in this season (Raghu IX-34), meaning thereby that it is silent during winter. The calls then continue throughout the spring (Raghu. IX-43, 47; Ku. III-32; Rtu. VI-23). Spring is also the season of courtship for the koel when the sex-intoxicated male is shown as kissing his female among the inflorescence (Rtu. VI-16). According to Salim Ali (1955) and Dharmakumarsinhji, the egg-laying period of koel extends from April to August. In Vik. IV-23, the koel has been shown as sex-intoxicated even at the end of summers. Observations of Kalidasa on the seasonal life of koel, therefore very well agree with those of the modern scientists. In Mal. IV-2 Kalidasa refers to a very peculiar behaviour of the koel that

during its courtship in spring the koel doesnot like rain or the eastern wind and that, to avoid these unfavourable weather conditions, it takes shelter in the hollow of some tree.

Courtship in this season has also been shown in the case of chakravaka and chakravaki when the male is shown to present a half-gnawed lotus stalk to his female (Ku.III-37).

Water birds in general flock round the lotus plants of lakes and ponds (Raghu. IX-27).

CONCLUSION

The observations of Kalidasa on the effect of seasons on the life of birds are acute and mostly correct. Study of his works from a scientific point of view is a great contribution to the science of biology and it adds an outstanding chapter to the history of science in Ancient India.

REFERENCES

- Dharmakumarsinhji, R. S (year ?). *Birds of Saurashtra*.
Published by the author himself, Dil Bahar,
Bhavnagar, Saurashtra. 561pp.
- Gupta, C. S. 1957. Prachina Bharata men jantu-vijnana-Kalidasa ke kabutara. (Zoology in Ancient India - the pigeons of Kalidasa). *Tripathaga*, Lucknow. 2 (8) : 89-92.
- Gupta, C. S. 1958. Prachina Bharata men jantu-vijnana - Kalidasa ke mora (Zoology in Ancient India - the peafowls of Kalidasa). *Tripathaga*, Lucknow, 3 (10) : 49-72.
- Gupta, C. S. 1960a. Prachina Bharata men jantu-vijnana - Kalidasa ki koela (Zoology in Ancient India - the koel of Kalidasa). *Tripathaga*, Lucknow, 5 (10) : 54-60.
- Gupta, C. S. 1960 b. Prachina Bharata men jantu-vijnana - kalidasa ke sarasa (Zoology in Ancient India - the sarus cranes of Kalidasa). *Tripathaga*, Lucknow, 6 (1) : 84-88.
- Gupta, C. S. 1961. Prachina Charata men jantu-vijnana - Kalidasa ke bagule (Zoology in ancient India - the egrets of Kalidasa). *Tripathaga*, Lucknow, 6 (11) : 33-36.
- Gupta, C. S. 1962 a. Knowledge concerning "hamsa" (a goose ?) in the works of Kalidasa (Aves : Anatidae). *Proc. Ist. All India Congr. Zool.* (Jabalpur Oct. 1959), Calcutta, Pt. 2 Scientific papers, 50-71.
- Gupta, C. S. 1962 b. Insects in the Literature of Kalidasa. *Bull. Nat Inst. Sci. India*, New Delhi, 21:145-172. (Read at the Sympo-

- sium on History of Sciences in Ancient and Mediaeval India held on August 4-5, 1961 at Calcutta).
- Hora, S. L. 1948. Sanskrit names of fish and their significance. *J. Asiat. Soc. Bengal, (Sci.)*, 14 (1):1-6.
- Hora, S. L. 1950. Zoological knowledge with special reference to fish and fisheries in India, before 225 B. C. Communication presente an Symposium d'Histoire des Sciences qui a en lieu a' Delhi en novembre 1950. Tirage A Part Des Archieve Internationales D' Histoire Des Sciences. Revue trimestrielle de l'Union Inter-Internationale d' Histoire des sciences. Publiee avec le concours financier de l'UNESCO (Numero 15-1951. pages 405 a 412).
- Hora, S. L. 1951. Matsyavinoda or a chapter on angling in the Manasollasa by King Somesvara (1127 A. D.). *J. Astat. Soc. Bengal. (Lett.)*, 27 (2):145-169.
- Husain, Afzal (1938). Entomology in India - Past, present and future. *Proc. 25th Indian Sci Congr., Part 2.* Calcutta, pp. 201-246. (Presidential Address, Section of Entomology and Zoology, 25th Indian Science Congress).
- Majumdar, R. C. 1953. Growth of Scientific spirit in Ancient India. *Sci. & Cult.*, 18 (10):460-472.
- Mani, M. S. 1955. *Introduction to entomology.* Agra University Press. 485pp.
- Nordenskiold, E. 1929. *The History of Biology*, London.
- Pandit, R. S. 1947. *Ritusomhara of Kalidasa.* The National Information & Publications Ltd. Bombay. 95pp.
- Salim Ali 1955. *The book of Indian birds.* Bombay Nat. Hist. Soc. Bombay. 142pp.
- Upadhyaya, B. S. 1947. *India in Kalidaia.* Kitabistan, Allahabad. 385pp.
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Fertilizers in Ancient India†

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The problem of feeding the population, increasing by leaps and bounds, especially in the developing countries, assumes special importance at this juncture whom scientists and technologists are seriously engaged in finding ways and means to increase farm production and reduce wastage by eradicating plant-pests and diseases as well as by devising proper storage methods. It would, therefore, be interesting to all lovers and scholars of Sanskrit hailing from different parts of the world to know something about the efforts made in this direction in ancient India.

Ancient Indian seers had established that plants were also living beings with the difference that their consciousness 'Samjna' was internal or dormant. All the same, they have feelings of both pain and pleasure. Sir J. C. Bose had demonstrated this fact to learned assemblies in many parts of the world. Just as preventive and curative medicines are prescribed for human beings, even so are they done for members of the vegetable kingdom. In ancient works on Silpasashtra (architecture) and in Kautilya's Arthasashtra as well as in Varahamihira's Brhat Samhita we come across sections dealing with trees or Vrksayurveda (treatment of plants) in connection with agriculture, gardening and town-planning. In the Atharva Veda too, there are prayers for the sweet and juicy fruits of trees and creepers. Many ancient sages like Kasyapa, Gargya, and Parasara as well as medieval scholars like Cakrapanimisra, Surapala and King Somadeva III of the Chalukyan dynasty, have written on this subject.

In Sanskrit poems and dramas, we come across the word Dohada which, applied to plants, means special treatment or manure or fertilizer. In the Ratnavali there is the famous verse, "Uddamotkalikam..." which speaks of the wonderful appearance of abundant flowers on the King's jasmine creeper as a result of the application of a Dohada,

† Paper read in the "International Sanskrit Conference" New Delhi 1971.

1 "Asastriyam alaukikam ca paramparayatam yam artham upanibadhnanti kavayah sa kavisamayah," and "Kavimarganugrahi katham esa doseh iti yayavariyah." Chapter XIV of Rajasekhara's Kavyamimamsa."

fertilizer, supplied by a hermit. There is also the case of the Dohadas coming under what are called "Kavisamayas¹" or poetic conventions.

Rajasekhara argues that the poetic conventions, fictitious as they may appear, are not to be rejected by poets. For, ancient scholars, well versed in the Vedas and their ancillaries as well as the Sastras, had roamed over many islands and countries and written these things on the basis of their first-hand knowledge. These things appear strange and untrue at present as a result of vast changes in climatic conditions, times and other circumstances. This is how the poetic conventions originated in days of yore.

These poetic conventions relate to other classes also such as birds and beasts. The Cakora birds drink nectar from the Moon's rays; the Cakravakas get separated from their mates at night; the Cataka can drink only the water that drops from the clouds. The deer are enraptured by the tunes of hunters and thereby get ensnared. The swan is supposed to possess the capacity to separate milk and water. The bee dies by kissing the Campaka flower, etc., etc. We are not concerned at present with these poetic conventions, but only with the special treatment given to plants for increasing their yield. This subject of fruit and flower culture as well as grafting was practised in ancient India under the aegis of the rulers. This knowledge was also hereditary in some families.

According to poetic conventions the Asoka tree should bear abundant flowers, if it be kicked by a charming young lady producing jingling sound of her anklets. On the face of it, it would look ridiculous and superstitious, especially to a person of scientific outlook. However, we have to remember that many a scientific discovery owes its inspiration to some so-called superstitions. Though the ancients, who were fond of myths and parables, couched their thoughts not in scientific terms but in figurative language, yet their statements had the value of practical utility and statements had the value of practical utility and traditional authority. If we analyse these conventions with a scientific spirit, I am sure, we may stumble on the truth lying underneath. I think that the jingling anklet subjects the Asoka tree to sound or music therapy in addition to giving it mild physical vibrations. It is well known that plants need water, light etc., to prepare their food. Similarly, they depend upon another physical agency viz., sound which has some influence on their physiology. Music is said to cast a spell on all living beings, as it is 'the food of love.' Experiments were conducted recently by subjecting certain plants and creepers to different tunes in order to find out their effect on their produce. Scientists have come to the conclusion that music does influence by and large, the life and

growth of plants and their yields. In this connection, let us turn to what Dr. T. C. N. Singh, Retired, Professor of Botany, Annamalai University has to say: "If they depend on light, why not on sound?" He discovered under microscopes that protoplasm was moving faster in the cell as a result of the sound produced by an electric tuning fork. This discovery led to his conclusion that sound must have some effect on the metabolic activities of the cell. His findings are that the sound of the Vina produces better results than that of the violin. He says further that male voice is healthier to the plant than female voice.* Among the Ragas or tunes, he says, the Caruketi is the most helpful in increasing the yield. Originally, it is said, such experiments were conducted in the U. S. A., Canada, Russia, etc. In the West, Bacch Sonnetta (A & B) was found to be very potent. Dr. Singh is of the opinion that the growth and development of forests are largely due to the presence of a large number of birds singing several tunes every day.

As mentioned above, the subject of **Dohada** is often met with in Sanskrit literature. In the *Naisadhiyacarita* of Sriharsa (12th century A. D.) who was well versed in many branches of learning, there is the reference to the fertilizer used for the pomegranate: While explaining the word **Dohada-dhupini**, the commentator Narayana says† that **Dohada** is that material by which an extraordinary growth of fruits etc., is achieved. In the particular context the **Dohada** or fertilizer was fumigation. The editor, Pandit Sivadatta, has quoted from some source three verses which mean—"Dohada is that material evolved by competent persons for producing flowers etc., on trees, flushes, creepers and the like out of season." The next two verses mention the materials used for fumigation: "For increasing the yield of pomegranates the best procedure is to pour on the tree the liquid of mutton and to fumigate it by burning sheep's wool and mutton underneath. If the same tree is smeared with a paste made of fish meal, ghee and Triphala as well as with the flesh of goats and sheep, and fumigated with the latter, its fruits will be as big as those of the Tala tree."

The subject of treatment of trees has been ably dealt with by Varahamihira in the *Brhat Samhita* Chapter LV, as it forms part of the topic of Gardening. Corresponding to the Green Manure employed in modern agriculture Varahamihira speaks of the Sesamum Treatment for the soil. According to him if flowers or fruits are destroyed suddenly the concerned tree or creeper should be watered with milk cooled after being boiled with horsegram, blackgram, greengram, sesa-

* "Manipal Record" Vol. IV-36 p. 2

† Naisadha canto I-82.

mum and barley. Another recipe is the following: Trees, creepers and bushes should be sprinkled daily with a mixture of two Adhakas, i. e., 128 Palas, of the powder of the dung of goats and sheep, one Adhaka of sesamum, one Prastha, i. e., 16 Palas of wheat particles, one Tula (100 Palas) of beef and one Drona (256 Palas) of water, kept for seven days.

The *Abhilasitarthacintamani* mentions a few fertilizers: (i) The soil underneath a tree struck by lightning is good for warding off trouble for trees from snowfall. (ii) Fumigation of trees by burning turmeric, Vidanga (*Erycibe Paniculata*) white mustard, flowers of the Arjuna tree, mixed with fish and the flesh of Rohito (a kind of deer) will not only help the growth of flowers and fruits but will destroy all worms and insects as well as diseases. (iii) Fumigation of a tree by burning Vidanga, asfoetida, Sindura, pepper, Ativisa, Vaca, Bhallataka and buffalo-horn mixed in equal quantities will destroy all kinds of insects and germs. (iv) Fumigation caused by burning fish, clarified butter, white mustard and banana leaves, will cause a bumper crop. (v) To produce fruits out of season, the trees should be watered with a decoction of Ankola mixed with ghee and honey and with the fat of parrots and deer. (vi) Milky trees will yield a bumper harvest if they are watered with milk mixed with Vidanga, honey and ghee, and fumigated with the smoke of burnt Nata and Kustha. (vii) The same effect will ensue in case the trees are scratched with thorns and fumigated with cow's ghee, water and fat of parrots and rats, (viii) Vines will bear sweet fruits in abundance, when they are manured with the excreta of cock and the liquid of horse's flesh. (ix) Orange trees manured with any flesh mixed with cow's milk and jaggery will bear plenty of fruits. Similar recipes are given in this work for mango, banana, wood apple (*Kapittha*), myrobalan, coconut, jujube, tamarind and such other trees.

Recently there appeared in the South Kanara district and some adjoining areas a peculiar disease of the roots of the banana plant, which has practically destroyed entire plantations. This work mentions a remedy for such a disease: The roots of the banana are to be scratched with a gold needle heated in the fire caused by burning the powder of some article (which is not clear). The Bijapura (citrous) plant will yield big fruits if it is manured with oil cake, liquor and fish and then watered. The jasmine which is considered as the queen of flowers in India, will bear flowers when it is burnt with the fire of chaff.

There are some plants that bear flowers having no smell at all. There are fertilizers for making such plants bear sweet-smelling flowers: Such plants are to be manured with the soil taken from the beds of plants

bearing fragrant flowers, and watered with a mixture of water, the powder of Gandhapatra, Musta (cyperus rotundus), Tagara (tabernaemontana coronaria) and Usira (andro pogon muricatus).

It is well known that the Amalaka fruit is astringent, but there are recipes for making it sweet: The tree should be scratched before the appearance of flower with a twig of the Kumaraka (Tamala according to the Dnanvantari-nighantu) and the scratched surface be smeared with a paste made of Japa, sesamum and equal quantities of honey and ghee, the mixture appearing like mire. Similarly the tamarind fruit can be turned sweet, if the tree is watered with a decoction made of the leaves of Jambu, Usira and Musta, or with one made of milk and the flesh and serum of the deer, parrot, antelope and jackal. Creepers besmeared with honey will produce red flowers, whereas with ghee they will bear white flowers. The lotus and lily too will have two flowers on a single stalk, if the plant is smeared with honey and ghee and manured with the powder of kalaya (leguminous seed) and mire.

Injections to roots are also prescribed for specific purposes. A small ball of the flower of Yastimadhuka, the white Kustha and honey should be injected into the root of any tree if does not bear fruit.

There is a recipe for making the fruit ever-green: The branch of the concerned tree should be wound round with cloth in seven rounds, and at the joint of the trunk and branch, it should be well covered with the skins of deer and elephant.

A tree or plant is said to be capable of being transformed into a vine by means of the following fertiliser: The root of the mango plant should be manured with a decoction of Ankola, dog's flesh and goat's milk mixed with oilcake. Such a vine will bear fruit in all seasons.

Cross-breeding of plants which is now practised on a large scale was anticipated by the ancients: When the seed of the Vartaki (egg plant) mixed with honey and ghee is kept inside a Kusmanda (ash gourd) for a week (?) and then sown, the plant will come to have the leaves of the ash-gourd, but fruits of Vartaki itself. Similarly, the plantain trunk is supposed to bear a pomegranate when it is watered with the flesh and serum of a boar and decoction of Ankola.

The Visvavallabha of Cakrapanimisra, referred to above, treats of many subjects pertaining to agriculture. In chapter VIII it deals with diseases of trees born of the three humours, and their remedies. A tree suffering from a Vataic disease becomes dry, small, thin, tall, droopy and lifeless. It also stops bearing flowers and fruits (page 302 Ms.). The remedy for this disease is the following:— A sickly tree should be watered with a luke-warm decoction of glossy meat, and sprinkled with the ashes of dried cowdung. It may also be watered with a mixture of

the extract of Nirgundi, Cassia fistula, leaves of Pancamra (?) and water, and its roots smeared with a paste of the above materials along with sesamum. Oil-cake may be used as a manure for warding off Vata-diseases. Similarly pouring at its root the urine of goats is beneficial. It may also be watered with a decoction prepared with Kulmasa, goat's dung, mango bark and Asvagandha. This work prescribes fumigation of a sickly tree with Nirgundi, Guggulu etc.

This work mentions in Chapter IX some fertilizers for bringing about marvellous effects: Take the dry seed of a ripe Kumuda fruit and smear it daily with dry cowdung powder and buffalo's urine for seven days. Then sow it in a good soil. It will then sprout in to a Karavira creeper. If the same seed be treated with Ankola oil for one full day, it would produce a Karela (?) creeper.

We have already seen a recipe for a mango tree to yield in all seasons. In this work a slightly different recipe is prescribed: The seed should be treated 21 times with the blood of hare and tortoise and sprinkled with milk and water. The banana plant will yield fruits looking like mangoes, if its roots are watered with a decoction of hog's blood and fat.

Kunapajala:- A fertilising solution called kunapajala is mentioned in the *Vrksavyayoda* of *Surapala* as well as in the *Upavanavinoda*. This solution is prepared thus: "Take the flesh, marrow of bones and flesh and fat of the deer, hogs, fish, sheep, goats and Sangins as far as possible, and mix them together and cook the mixture in water. When it is sufficiently cooked, pour the whole thing into a pot and add milk to it. Now add powdered oilcake of sesamum, and honey to it. Mix it with soaked blackgram and ghee. Spread this mixture in a shallow vessel and pour hot water on it. When this is transferred to a pot, the later should be sealed and buried for a fortnight in the strong room (or granary?). The contents of the pot are now called **Kunapajala**, which becomes a tonic for trees."

According to *Surapala's* prescription, Matulunga (citrous) fruits would become as big as Kusmanda (ashgourd), if its creeper be watered with a solution of oil-cake, fishmeat, rat-flesh and liquor in water. Bilva and wood-apple trees would bear sweet fruits, if they be watered before their flowering season, with a solution of honey, ghee, milk, jaggery and its sediment. Similarly, the **Kantuka-cintamani** gives a prescription for making grapes sweet and to remove sourness of mangoes. The *Agni-purana* has a section dealing with *Vrksayurveda*. The *Krsiparasara*, which is evidently a later compilation, treats of many topics of general interest to agriculturists, such as rainfall in the different months, preservation of seeds, sowing months etc. "Ghee, oil, butter-milk,

lamp and salt should never be kept on seeds even by mistake", says the sage. Sage Gargya too is quoted in this connection.

Just as prenatal care or treatment is necessary for human beings even so seed-treatment is profitable before sowing. All seeds are to be soaked in milk for ten days, taking them out everyday with the hand smeared with ghee. They must be rolled many times in cowdung, fumigated with the flesh of deer and hog, and then with flesh and hog's marrow they should be planted. They should be sown in a prepared soil (after the sesamum treatment). Lastly they should be sprinkled with milk and water. Varahamihira has prescribed in addition some special recipes for the treatment of the seeds of Tamarind, Kapittha and Slesmataka. The tamarind seed should be sprinkled with a compound of the flour of rice, blackgram and sesamum as well as particles of wheat and stale meat and repeatedly fumigated with turmeric powder. The Abhilasitarthacintamani gives some recipes for seed-treatment on similar lines : Ripe fruits without any blemish ought to be selected and dried in the sun. Then they should be coated with cowdung and fumigated with Vidanga and ghee for five days. This is the general recipe for all kinds of seeds. Those of milky trees are treated thus : Soak the seeds for ten nights in cow's milk, dry them in the shade, and mix them with the ashes of Vyaghri (or Brhati) and of barley and wheat. Lastly give them a coating of cowdung. Seeds kept in the oil of Nrsamsa (?) and Ankola for seven days and then sown in a soil wetted with hailstones will sprout quickly. The pomegranate seed should be wetted 21 times with the blood of Kukura (or Kukkura?) before sowing for a good yield. Any seed soaked in milk mixed with the flesh and serum of fish and boar would be very effective. So would be a tamarind seed kept for seven days in milk mixed with the serum of fish and boar as well as with sesamum oil and then smeared with the ashes of Brhati and Tilakanda (sesamum plant). To make the fruit unusually big, wet the seed with water mixed with human flesh and serum as well as with the powder of ivory.

Before sewing the seed, the soil should be tested. For fruit cultivation the soil must contain sweet water and be free from peddles. It must also be glossy and unexposed to frost. If sesamum, blackgram and greengram grow luxuriantly, that soil is ideal for flower and fruit cultivation. The pit for the trees should measure four feet deep square. The pit too should be treated and manured: It should be filled with plenty of bones and cowdung and burnt. Then remove the ashes and fill the pit with a layer of sand at the bottom and another layer of the flesh and serum of goats over it along with water. After this the seed is to be sown in the pit. Instead of seed a tender plant may also be planted the-

rein. Cooked white rice mixed with curds and rock salt is also thrown into the pits for good results.

The foregoing paragraphs, I am sure, will draw the attention and rouse the curiosity of scholars and scientists, thereby helping them in further researches in the extension of the horizon of human knowledge. It would be excellent, if scientists could analyse some of the ancient fertilizers chemically and throw some light on the genuineness or otherwise of the ancient methods. My aim in this paper was to show that the ancients had evinced sufficient capacity and enthusiasm for analytical thinking and scientific experimentation even in those far-off days when man's activities were guided more by belief than by reason.

It (India) has always appeared to the imagination of the western world adorned with whatever is most splendid and gorgeous, glittering, as it were, with gold and gems and redolent of fragrant and delicious odours. Though there be in these magnificent conceptions something romantic and illusory, still India forms unquestionably one of the most remarkable regions that exist on the surface of the globe. The varied grandeur of its scenery and the rich production of its soil are scarcely equalled in any other country.

(Murray's History of India, P. 1)

Apasmar (Epilepsy)

An Atharva-Vedic Description and Cure

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Bhesaj, medicine or therapeutics is the most important teaching of the Atharva-Veda, that is why it is regarded as Bhesaj, Amrit and Yatu Veda. Atharvan priest according to Gopath Brahman is Bhisag (physician), and the aim of the Atharva-Vedic Bhesaj is to maintain life upto hundred years. The Bhaisajayani section consists of those Mantras or spells which are used to cure diseases and ailments of both the kinds, psychogenic and somatogenic. The Bhisag treats patients by means of his spells, sacrifice and medicine prepared from herbs and charged with mantra qualities.

Ayurveda is called the 'upveda' of the Atharva-Veda, and the earliest exponents of the Indian system of medicine, Ayurveda, acknowledge the Atharva-Veda to be the source of their knowledge. The Atharva-Veda contains the descriptions of symptoms, diagnosis and therapy of all kinds of disorders of all ages and sexes. All types of psychogenic, somatogenic and hereditary diseases are cured. Among the severe psychic disorders, Unmad (insanity), Grahi (hysteria), Apasmar (epilepsy), Manaspap (Schizophrenia), and Bhaya (Phobia) are dealt in the Atharva-Veda. Out of these we shall describe here the symptoms, etiology and therapy of Apasmar (epilepsy) as given in the Atharva-Veda.

The description of epilepsy is given in A.V.VIII/1/3, 4,6,7,16,18-21, XIX/36/6 and II/4/2, out of which it is specifically and clearly given in AV. VIII/1/16. Max Muller says that according to Kesava, AV.1/22 and according to Kausik, AV.VI/105 discuss epilepsy.¹ But most of writers do not agree with them. There is also confusion regarding AV.VIII/1/16 which is made clear in this article. Max Muller explains it for convulsions, but puts a question mark after, "The demon that tears out the tongue?"² Although he explains well that Jambh is for convulsions but he fails to understand the symptoms of demon that tears out the tongue. Whitney says it is Jambh (demon who does so) but shows inability to understand this Mantra and puts three times the question mark in between this Mantra.³ But while explaining AV II/4/2 he thinks Jambh is convulsions or lockjaw. So we can say Max Muller and Whitney think Jambh is convulsion. Sharma

following Sayan thinks that Jambh is a demon of fatal mental disease.⁴ Shende quotes Bloomfield and Whitney for the interpretation of Jambh and believes it to be convulsions or lockjaw.⁵ Karambelkar calls Jambh a demon of convulsion.⁶ Arsh explaining AV.II/4/2 says, "Jambh is a mental diseases of destruction which catches hold the joints."⁷ Satavalekar gives the meaning of Jambh as teeth, mouth and jaws.⁸ According to Dhatu Path, Jambh is 'जम्भी गात्र विनामे' which means twisting of the body. In dictionaries Jambh also means grinding.

So owing to the similarity of the symptoms of twisting the body and grinding and locking the teeth in epilepsy with the meanings of Jambh the disease of epilepsy is named, Jambh. Now we derive the conclusion that AV.VIII/1/16 is for psychic disorder called convulsions, which is named symbolically and personifically, because symbolism and personification play a great role in the language of the Atharva-Veda, as an attack by Jambh. So Jambh is the name of the disease in this mantra.

SYMPTOMS

We have already seen above that for Grahi (hysteria) so many and specially Max Muller has frequently used the word convulsions. So the disease of convulsion described in AV. VIII/1/16 has some similarity with hysteria though it is a different disease. Now let us see its symptoms as described by Max Muller. During convulsions patient lies down inattentive and cut off from the world, mind (consciousness) disappeared (becomes unconscious), only man and youth are attacked and women weep for these men.⁹ Its three outstanding symptoms are: (a) convulsions close the jaws and stiffen the body of the patient, (b) throw darkness (make unconscious) and (c) tear the tongue of the patient. With very minor variations others have also given the above symptoms but most of them have misunderstood the type of convulsion and the name of this disease.

Now let us see what modern psychiatry describes about epilepsy. Dawson W.S. has given a detailed description of epilepsy and almost all the above symptoms have been given by him, that consciousness is lost, 75 % of cases begin before the age of twenty, tongue is bitten and joints become stiff.¹⁰ We have seen that Max Muller has given the name convulsion to both kinds of diseases—Grahi (hysteria) and Jambh (epilepsy). It means he has confused between the types of convulsions of hysteria and epilepsy which even some medical men do sometimes. Dawson has distinguished between hysteria and epilepsy on several points, out of which, the outstanding are—the epilepsy is more common in males which hysteria is not, in epilepsy the tongue is often bitten which does not happen in hysteria, and in hysteria the

consciousness is lost gradually but in epilepsy it is lost sudden.¹¹ The most remarkable symptom in AV. VIII/1/16 is the closing of the jaws and tearing the tongue and this is the only outstanding symptom of epilepsy which distinguishes it from other types of convulsions. One more notable similarity is pointed out by Brown¹² and Drake R.M.¹³ who say that in epilepsy the consciousness is clouded and explaining AV.VIII/1-16 Max Muller says that darkness falls. The expressions clouded and darkness are very similar since clouds often mean dark and they shade a thing. So the symptoms shown in AV.VIII/1/1-16 are only specific to epileptic convulsions. Hence it is the disorder of epilepsy personified and named as Jambh (in which jaws cut the tongue).

ETIOLOGY

Sayan (AV.II/8/1) considers convulsions as Kshetrya (hereditary) disease coming through parents. Shende also thinks like this. Bloomfield has also translated it as hereditary disease. So there is found the effect of heredity in epilepsy. The word Kshetrya also refers to body so in this way it is the bodily, i. e., the organic disorder which is originated from somatic discordance. Thus according to the Atharva-Veda heredity and organic discordance are the two causative factors in epilepsy. Modern psychopathology also believes that heredity is a great contributory factor in epilepsy and it is an organic disorder.

THERAPY

Several therapies for the cure of Apasmar are prescribed in the Atharva-Veda. The foremost of them is the use of Jangid (a tree) product in the form of amulet (AV.II/4/2) and the medicines produced by it. Havan chikitsa and suggestion (mantra) therapies are also given to make over the psychological side of the epileptic. But which this Jangid tree is ? Unfortunately at present it falls into the category of unrecognisable and untraceable trees of the AtharvaVeda. According to medical and herbal experts, if this Jangid tree is traced, about twenty major diseases will get relieved. The expert search is on and will reach its fruition in the future. In modern psychiatry mostly the medicinal approach of therapy is made to cure epilepsy and the psychotherapeutic approach is only supportive. Thus its curative approach is in accordance with the Atharva Veda.

Consequently, it is now quite clear that the views of the Atharva Veda and the modern psychiatry are the same regarding the symptomatology, etiology and therapy of Apasmar (epilepsy). Had it been known earlier much of the modern psychiatric labour and energy would have been saved. Any way a scientific search is required to

find out the Jangid tree in order to give relief to the patients of epilepsy, which has always been a major mental disorder of humanity.

REFERENCES

1. Max Muller, *Sacred Books of the East, Vol. XLII. Hymns of Atharva Veda* (Moti Lal Banarasi Das Delhi, 1964) pp 264,513.
2. *Ibid*, p-55.
3. Whitney, W. D , *Atharva Veda Samhita* (Moti Lal Banarasi Das, Delhi, 1962) Vol. I. Bk. VI p. 475.
4. Sharma, R. C., *Atharva Veda Samhita*, Sayan Bhasya (Mathura), kand VI p. 446.
5. Shende. N. J., *The religion and Phil. of Atharva Veda* (oriental Research Institute, Poona, 1952), p. 45.
6. Karambelkar, V. W., *The Atharva Veda and the Ayurveda* (Usha karambelkar, Nagpur, 1961), p. 84.
7. Arsh, P., *Atharva Vediya Mantra Vidya* (Gurukula Kangri Press, Hardwar, Sam. 1999), p. 89.
8. Satavalekar, S. D. *Atharva Veda Ka Subodh Bhasya* (Swadhyaya Mandal, Pardi, Surat, 1958) Kand. III/27, p. 116.
9. Max Muller, op. cit. p. 53 ff.
10. Dawson, W. S., *Aids. to Psychiatry* (Bailliere, Tindall and Cox., London, 1944), pp. 182 ff.
11. *Ibid.*, pp. 89, 90.
12. Brown, J. F., *Psychodynamics of Abnormal Behaviour* (Mc. Grow Hill Co., Inc. London 1940), p, 347.
13. Drake, R. M., *Abnormal Psychology* (Little Field, Adams & Co., Paterson, New Jersey, 1959), p. 104.

At The Holy Feet of My Master

His Holiness Shri Swami Shraddhananda Ji Maharaj

Shri Swami Dharmananda Saraswati, Vidyamartanda
Ananda Kutir, Jwalapur.

I gladly hail my Master
An illustrious immortal martyr,
He was embodiment of valour
For the uplift of the downtrodden
He did nobly endeavour.

He was noble virtue's golden treasure,
His heart was crystal pure.
No iota of hatred to any one he bore,
From it ever flowed milk of mercy,
No fear, no malice and no jealousy,
He stood like a rock where there was opposition.

He had risen above all passion.
Before Gurkhas in Delhi, he opened his breast,
"O strike at me first
And then think of the rest."
Then bayonets fell
They fell at his feet.
Boldness personified
He was truly glorified.

I salute my master
He stood at the top
By his selfless service
And his noble sacrifice.
He is enshrined in my mind,
Innocent like a child
And absolutely kind.

He enjoyed bliss by pure faith,
Be full of faith to everyone, he saith.



Vedic Linguistics

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'It was in India', says BLOOMFIELD, 'that arose a body of knowledge which was destined to revolutionize European ideas about language.'¹ It was the Indian grammar that 'presented to European eyes, for the first time, a complete and accurate description of a language, based not upon theory but upon observation.'² Indian linguistic studies are the oldest and most valuable. Whereas the ancient Greek and Roman linguistic studies were speculative and philosophical, the Indians were the first to have initiated descriptive and analytic studies of language based on observation. What Bloomfield, Chomsky, Fillmore, Firth and Halliday have suggested in the twentieth century had been suggested by Panini, Patanjali, Katyayana and Bharthari many centuries ago in India. Despite 2500 years history of human thought, none have excelled the Indians.

Indians were the first to classify the sounds, to emphasize and establish the role of vocal organs in the production of speech, to say that the sentence was the basic unit of language, to remark that language without meaning was like a dry wood which needed fire to burn,³ and to establish and specify linguistic universals. It were the Indians again who gave a philosophical basis to grammar, and said that language existed in a speech community, in culture. Our theories of semantics and our advances in the field of etymology and morphology are the best in the world, and everyone in the east and the west owes to us something or the other in the field of phonetics.

Our greatest contribution is in the field of phonetics.⁴ The so-called London School of Linguistics which has earned laurels for its achievements in phonetics is a by-product of Sanskrit phonetics of ancient India. We begot the British phonetics which in turn begot the American phonetics. Thus all phonetic developments in the west directly or obliquely owe to us a great deal. Our ancestors established the excellent standards of economy and precision in the description of linguistic phenomenon. As stated by BLOOMFIELD again, we were the first in the history of human thought who 'worked out a systematic arrangement of grammar and lexicon.'⁵

In a sense, modern linguistics began from us in 1786 with the discovery of Sanskrit by WILLIAM JONES who declared :

The Sanskrit language, whatever be its antiquity, is of wonderful structure, more perfect than Greek, more copious than Latin, and more completely refined than either.⁶

No one can deny the truth of the statement that comparative philology was born the day when Sanskrit was opened to the eyes of the western world. The enthusiasm that stirred the hearts of those first pioneers into the realm of India's sacred language and India's ancient lore still throbs in the veins of their followers to-day and will quicken the pulse-beat of inspired workers for generations to come.⁷

J. R. FIRTH, a distinguished linguist of England rightly says :

Without the Indian grammarians and phoneticians whom he (Sir William Jones) introduced and recommended to us, it is difficult to imagine our nineteenth century school of phonetics.⁷

SIMILARLY W.S. ALLEN REMARKS :

In their recognition of the voicing process the Indian phoneticians make one of their greatest single contributions.⁸

AND

Only in the latter part of the nineteenth century, under the influence of Indian teaching, does the recognition of the voicing process make headway.⁸

IN THE WORDS OF R.H. ROBINS :

The Indian tradition of linguistic scholarship, devoted to the Sanskrit language, was of a very high order and its influence on Western linguistics was profound and is by no means over. Unlike the Greek and Latin grammarians and their medieval successors, Indian linguists exhibited great interest and masterly competence in the phonetic analysis and descriptions of their speech; and the development of the phonetic and phonological levels of linguistic analysis in the last hundred years or so owes a great deal to their work.⁹

ROBINS FURTHER WRITES :

The work of the Indian linguistic scholars is distinguished historically by two features, the excellence of their phonetic description of Sanskrit, both as regards its accuracy and the systematic terms in which they stated it, and their ability to carry formal analysis below the word in terms corresponding to the modern morpheme.¹⁰

The contribution of Sanskrit linguists is indeed of immense value. And most of the work in Sanskrit was done during the Vedic

period. Sanskrit linguistics formally should have begun the day the Indian rishis and munis began to understand and interpret clearly the Vedic speech. They permitted no corruption in the reading and recitation of the Vedic texts. This speaks of their very sound phonetic base. It was a sin to mispronounce a Vedic *richa*.

The germs of this interest may be traced in the *Rigveda*, which dedicates two entire hymns to Speech (X.71 and X.125). It mentions three stages in the development of language : (1) inarticulate speech, (2) primitive articulate speech, and (3) languages proper. The inarticulate speech was the hissing of serpents, or the humming of insects, the notes of birds, and the sounds made by other animals. The primitive articulations of speech were first employed by men in imparting names to objects, thus leading to the third stage, that is, language proper, which "was created by the wise, as men cleanse cornflour in a cribble" (X.71, 1). Thus the *Rigvedans* clearly distinguished between 'sign', 'sound' and 'human communication', the concepts which became vitally important in the west later on.

There is another well-known hymn in the *Rigveda* (IV, 58, 3) in which, speech, according to Patanjali's interpretation (cf. the Introduction to the 'Mahabhasya'), is compared to a bull, the sounds of which are attributed to three human organs — the lungs, the throat, and the head. The Vedic scholars had thus a very sound and scientific knowledge of human organs of speech.

Aitareya Brahmana attributes speech to Indra¹¹, and compares it to the ocean,¹² on account of its inexhaustible nature. Enough evidence in the Vedic literature is available to prove that the study of linguistic sciences had reached a considerably advanced stage between 800 and 1000 B.C. The taste grew during the period of *Aitareya Aranyaka*, which describes various sounds in terms of different objects in nature. It compares the consonants to the nights, and vowels to the days (II, 2, 1), presumably owing to the superior perceptibility of the latter in normal speech. Furthermore, the consonants are compared to the body, the voice to the soul, and fricatives to the breath (II, 2, 1). At another place in the *Aitareya Aranyaka*, the plosives are said to be a form of the earth, the fricatives of the atmosphere, and the vowels of the firmament (III, 2, 5). Yet in another passage, the fricatives are compared to breath, plosives to the bones, vowels to the marrow, and semi-vowels to the flesh and blood.

The term 'samhita' was interpreted as the interval between two syllables; the interval by which the accent or the quantity of two syllables was distinguished. The Samhita-text of the Vedic hymns was reduced to the *Pada*-form. In this period of the study of the *Pada*-text

rules of phonetic combination (*sandhi*), of accent, and of the formations of compounds, *samasa* were studied elaborately. The father of the *Pada*-text was Shakalya. By the *Pada*-text, *mantras* were divided into *padas* and *shabdās*.

The *Pratisakhya*s are the first treatises on phonetics and formal grammar. They provide a scientific classification of Sanskrit sounds and the *ganas* (the lists of words remarkable for grammaticality in any way). These *Pratisakhya*s are : the *Rig-Pratisakhya* on the *Rigveda*, the *Tetariya Pratisakhya* on the *Krishna-Yajurveda*, the *Vijasney-Pratisakhya* on the *Shukla-Yajurveda*, the *Rig-Tantra-vyakarana* on the *Sam-Veda* and the *Atharva-Pratisakhya* on the *Atharva-Veda*.

'Siksha' implied "general phonetics" while 'Pratisakhya' signified "applied phonetics." It was the grammatical form of words which constituted the basis for the phonetic observations of the *Rig Pratisakhya*. The object of the treatise is to describe the characteristic features of the four parts of speech—the noun, the verb, the affix, and the particle. One main feature of the *Pratisakhya*s was their treatment not of language of 'priests who had to be drilled into a proper recital of the sacred texts' (as supposed by some Western scholars), but of a living language used and spoken by the people those days.

No definite historical dates of these *Pratisakhya*s are available. By and large, scholars say that they belong to 800-500 B. C ; some others put them between 500 and 150 B. C. Nevertheless, they seem to be older than Panini.

The oldest linguistic treatise preserved in India is the *Nirukta* (Explanation) of Yaska (fifth century B. C.). It offers brief explanation of Rigvedic words which had already become obscure. Though the writers of the *Brahmanas* had already established themselves as etymologists, yet Yaska was the first methodical and scientific minded etymologist. He hinted at the idea to be developed by later grammarians that words were ultimately to be traced to a limited number of roots. He considered the words listed in the *Nighantu* (the list of usages).

Panini in his work has mentioned the names of some grammarians. They were Aipishali, Kashyap, Gargya, Chakravarman, Galav, Shak-lyā, Shaktayan, Senak, Sphotyan, Bhardwaj. They were his predecessors and contemporaries. But it was Panini who struck out a new and original path. The whole of his work depends on the *Sivasutras* where the *Prayataharas* (the terminology he is going to adopt) are set forth. By his masterly analysis he arrived at the fundamental conception of roots—which are a set of monosyllabic constants, each a concept, and each expressing an action (*kriya*). He divided the parts of speech into three (*svanta*, *tingat*, and *avyaya*), and recognized the sentence as

the basic unit of language. His *Asthadhyayi* is the first formal grammar in the history of letters. It is not speculative or philosophical like the grammars of the Greeks and Romans. It is descriptive and analytic and treats phonology and morphology in great detail. It makes very brief statements about linguistic phenomena, most of them are designated by arbitrary sounds or complexes of sounds as code-words. The underlying philosophy of the Paniniya system are the assumptions such as *dhatu* ('base', literally 'constituent'), *krit* ('primary demonstrative', literally 'making'), and *taddhita* ('secondary determinative' literally 'put to that'), etc.

Panini is the best known of the Indian linguists. His date is not certain, but around 500 B. C. or later has been suggested in the light of the evidence available. His grammar has been called by BLOOMFIELD 'One of the greatest monuments of human intelligence.'¹³ Its main characteristic is its startling economy and brevity. It avoids repetition. It describes, with the minutest detail, every inflection, derivation and composition, and every syntactic usage of Sanskrit. "Panini is also to be credited with the device of zero in linguistic description, by which part of an apparently irregular set of morphological forms can, by positing an analytic entity without actual exponents as an element of their structure, be brought into line with the regular forms."¹⁴

The influence of Panini grammar upon Sanskrit was immense and long-lived. First of all the *Astadhyayi* was a great and historical achievement of a great analysing mind, unparalleled and unique in the history of mankind, and as such it deserved a method of recognition. Secondly whatever was analysed by him had already in his own days acquired a peculiarly sacred character in the minds of the people. Thus a religious authority was added to Panini to determine what was 'right' and what was 'wrong'. So besides being an analytic and descriptive account of the Sanskrit language, Panini's grammar became prescriptive too.

In the post-Panini era the first name that strikes the historian of linguistics is that of Katyayana. There is a controversy about his time. Some scholars regard him as the senior of Panini. He was the leader of the Aindra school of Sanskrit grammar. The name, 'Aindra grammarians' seems to imply that the school was of a later date than Panini. But the terminology and the methods of this school are decidedly of a more primitive and less developed type than those of Panini. But at the same time it should not be forgotten that we find many of the technical terms of Panini even as early as in the works of Yaska. Perhaps 'the Aindra school is post-Paniniya in date though pre-Paniniya in substance.'

As the language had changed by the time of Katyayana, he felt the necessity of changing the grammar too. He set about amending Panini and took only those *sutras* which he thought required such treatment. He wrote *Varitkas* and his grammar is full of descriptive adequacy and is also remarkable for its explanatory value.

In the words of GRAY, 'With Patanjali (2nd century B. C.) Indian linguistic science reached its definite form, for all later Indian treatises on the subject are little more than further commentaries on his work. The system thus established is extremely detailed as to phonology (including accent) and morphology; syntax it scarcely touches; etymologies are very frequent, in obvious words usually with success, but in the obscure words frequently almost ludicrous; and these etymological attempts naturally lead to semantic explanations.'¹⁶ It is believed that his work *Mahabhashya* should have been written in 2nd Century B. C. His is a work written in defence of Panini and interprets elaborately the *sutras* of Panini. He also attacks Katyayana rather severely. But the main contribution of Patanjali lies in the treatment of the principles of grammar enunciated by him. After Patanjali the tradition of Sanskrit linguistics declines and is divided into various *sampradayas* (schools) later on.

Nevertheless, the contribution of Vedic linguistics is immense. It is both methodical and substantative. It is impossible to think of the world linguistics without Vedic linguistics. It were the Vedic scholars who enunciated and initiated a vast number of linguistic concepts and hypotheses which were developed by later scholars in India and abroad. They asked many relevant questions which opened new insights.

NOTES AND REFERENCES

¹ *Language*, Indian Edition : Motilal Banarasi Dass, Delhi, Varanasi Patna, 1963; (first pub. 1933), p. 10.

² *Ibid.* p. 11.

³ यद् गृहीतमविज्ञातं निगदेनैव शब्दयते,
अनग्नाविव शुष्कैवो न तज्ज्वलति कहिचित् ।

Yaska : *Nirukta*, 1. 18.

⁴ See W. S. Allen, *Phonetics in Ancient India*, OUP.

⁵ *Language*. p. 11.

⁶ "Asiatick Researches." *Journal of the Asiatick Society*, Bombay, 1786.

⁷ Quoted by Radhey L. Varshney, *An Introductory Textbook of Linguistics & Phonetics*, Student Store, Bareilly, 1977, p. 414.

- ⁸ *Phonetics in Ancient India*, p. 33.
 - ⁹ *General Linguistics : An Introductory Survey*. Longmans, 1967, p. 337.
 - ¹⁰ *Ibid.* p. 78.
 - ¹¹ IX. 2 : *Vag ghy aindri*.
 - ¹² XIII. 21 : *Vag vai samudro na Vak ksiyate*.
 - ¹³ Leonard Bloomfield, *Language*, p. 11.
 - ¹⁴ R. H. Robins, *op. cit.*, p. 378.
 - ¹⁵ Louis H. Gray, *Foundations of Language*. Macmillan, New York, 1958 (first pub. 1939), p. 422.
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The Doctrine of Prakriti

(A Scientific Exposition)

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In the remote past the sages of India enunciated many important philosophical principles. Their scientific counter-parts, discovered only recently and established in the world of matter, have imparted to them a new significance and universality. One momentous example is the doctrine of Prakriti.

Normally we regard God as a unity - as Creator and Ruler of the Universe, as Father, Mother and Friend of all creatures, who personally controls everything in the world. But by close observation and deep reflection Indian seers found that many phenomena of nature, like sunrise and sunset, seasons, tides and phases of the moon, occur with predictable regularity and show no evidence of interference by supernatural beings. Accordingly they found it necessary to postulate two distinct but related and complementary aspects of God, namely Purusha (person) and Prakriti (Nature or Matter). Purusha is person or Spirit and possesses intelligence and feeling. Prakriti, as the complement of Purusha, is impersonal and its distinguishing characteristic is that it is *Jada*, that is to say, inert, devoid of both feeling and intelligence.

Paradoxical as it may seem, Purusha, though a person, is a mere spectator, at best an overseer, who does nothing, while the insentient, heartless and brainless Prakriti creates and sustains the universe on his behalf. The Gita says: Though the author of this universe, know Me, the immortal Lord, to be a non-doer. (IV/13) With Me as supervisor, Nature (Prakriti) brings forth the whole creation, both animate and inanimate; it is due to this cause that the wheel of Sansar is revolving. (IX/10) He really sees all actions being done in all respects only by Nature and the Self as the non-doer. (XIII/29).

Prakriti is sometimes explained as the Divine Mother of the universe (with Purusha as Father) and sometimes as Maya, The illusive or delusive power of God, which hides him from us, makes the One appear as many and shrouds the workings of Nature in deep mystery. Both these interpretations account for certain well known facts of life. But the most rewarding explanation is that briefly hinted in the Gita and clarified by science: Prakriti is the cause of the generation of causes and effects (XIII/21). It is Energy-Law-System which rules and runs the universe. The Energy is that of God, which is present every-

where, latent, there manifest producing great results from small causes, which is all-powerful and ever at work and yet bound by laws made by God, which are fixed, universal, eternal and self-acting. The forms of energy are numerous. The laws of Nature are legion; and the laws of health are different from those of wealth, of flying different from those of navigation.

The best of man-made machines require an external source of energy and constant supervision. But the vast machine which God has made is so perfect and its energy supply so inexhaustible that it runs smoothly and automatically without requiring any day to day attention or direction from him. This arrangement alone makes rational science and rational religion possible. It has introduced order where, without it, there would have been only chaos and confusion. This, again, is the only arrangement worthy of a perfect Being who possesses infinite power and infinite wisdom and does not act like a petty official running hither to assert and show off his authority and direct everything personally. Man is not required to overcome the will of God, which in any case would have been impossible, but only to discover and obey the laws of Nature; and if he does so, his well-being is assured.

The distinction between Purusha and Prakriti has been emphasised in our scriptures in another way. Broadly speaking, Vidya or Brahma-Vidya is knowledge of the Spirit-while A-Vidya is knowledge, other than spiritual, that is to say, knowledge of Prakriti or secular knowledge. A-Vidya and Vidya are not contradictory but complementary. Both are necessary for the well-being of man; the former for living happily in the world and the latter for going beyond. Those who care only for the former grope in darkness; but in still deeper darkness are those whose interests are limited to the knowledge of God.

It is to be particularly noted that the authority that judges, rewards and punishes human actions is not Purusha, the Person, but Prakriti, which being inanimate, is impervious to prayers, petitions, gifts as well as threats. The Gita declares: "The Lord determines not the doership nor the doings of beings, nor even their contact with the fruit of actions. It is Nature (Prakriti) that performs these functions." (V/14).

In short, the results of a man's actions are determined by fixed laws and are, therefore, automatic and inexorable, but can be reinforced, modified or cancelled by his own further actions. Success and happiness in world are best obtained by taking appropriate steps in accordance with the laws of nature rather than by a mere appeal to Purusha through prayer, meditation and worship. He who has

grasped the respective roles of Purusha and Prakriti and acts accordingly in daily life attains salvation. For says the Gita, "He who thus knows Purusha and Prakriti with its threefold qualities, even though engaged in all sorts of activities, is not born again" (XIII/23).

THE LAWS OF NATURE

For centuries science made little progress because of the belief that the universe is governed in every detail by Divine Will which is variable and unknowable and against which human intelligence and efforts are of no avail. Later on, when it was realised that gods, angels and spirits do not interfere in the workings of Nature, one great obstacle to the systematic study of nature was removed and two basic postulates of science emerged. The first is that events do not take place without a preceding cause, that something cannot come out of nothing. Whatever it may be – an eclipse, a rainbow, a strange animal, a thought or a feeling—does not come from nothing but must have a cause. It may be easy or difficult to correlate cause and effect, but neither can exist without the other.

The second postulate is that of the Uniformity of Nature. Nature is uniform and orderly. Not only do things and events have a cause, but the same cause, under similar conditions, produces the same effect. The properties of matter are invariable, and what has happened once will happen again when conditions are the same. If nature were erratic or inconsistent, science and even the management of life would be impossible, for there would be no laws to discover or guide us and everything would be enveloped in a cloud of uncertainty. The amazing success of science is based on these fundamental assumptions and is positive proof of their validity.

The laws of nature are different from man made laws. The latter vary from country to country and even in the same country they are revised from time to time. Keep to the left, says the English law, keep to the right, says the American. The punishment for the breach of human laws is not automatic. Many escape penalty because they are never caught, while the high and mighty can even bend the law to suit themselves. But the laws of nature are eternal, immutable, universal, impersonal and inexorable. The punishment for their breach is automatic and generally comes silently and without any warning. Nature is friendly to those who cooperate with its laws, but crushes and annihilates those who constantly violate them.

It will be seen that the Law of Causation, which according to scientists holds sway in the world of matter, is the same as the Law of Karma, which Hindus apply to the world of the spirit. The Law of

Karma, again, is only a corollary to the Doctrine of Prakriti, which covers both the physical and moral sides of life. It is a pity that the Hindus who discovered the doctrine of Prakriti ages back, did not use it to unravel the mysteries of physical nature and the westerners who have so successfully applied it for this purpose, are reluctant to extend it to the moral and spiritual world. Had it been otherwise, the history of the world would have been different.

WHAT OTHERS SAY

Increasingly thinkers all over the world—scientists, philosophers and even theologians — are coming round to the view that God does not work by personal fiat but through fixed laws, which are universal, consistent and discoverable. Thus, according to Emerson, the universe is ruled not so much by a superhuman power as by the immanent divinity in things, which works according to laws. "These laws", he said, "execute them-selves. They are out of time, out of space and not subject to circumstances the world is begirt with deity and with law." "It is only when we discern", writes Lord Samuel in his book *Belief and Action* "in nature itself the reign of law, and in the law the hand of God, that we may see a divine splendour in the natural world that the about us, and may open an access to what lies beyond."

Fulton Oursler writes in his book *The Precious Secret*: "God not only made the laws; he abides by them. It is not nature that is incoherent but man who is ignorant; he has still a long way to go.... If this were not so, we would not have laws at all but only caprice." Max Born, who won the Nobel prize for his work in physics, writes in his book *The Restless Universe*: "Truth is what the scientist aims at. He finds nothing at rest, nothing enduring in the world. Not everything is knowable, still less is predictable. But the mind of man is capable of grasping and understanding at least a part of Certain : amid the flight of phenomena stands the immutable pole of law."

Emphasising the shift from the will of God to law and system, famous psychologist William James wrote in his book *Varieties of Religious Experiences* "Science, on the other hand, has ended by utterly repudiating the personal point of view.... The books of natural theology which satisfied the intellects of our grandfathers seem to us quite grotesque, representing as they did, a God who conformed the largest of things of nature to the paltriest of our private works. The God whom science recognises must be a God of universal laws exclusively, a God who does a wholesale, not a retail business. He cannot accomodate his processes to the convenience of individuals."

Similarly G. R. Harrison says in his book *What Man May Be* : "When one studies the picture of evolution....as nature tried first one experiment and then a million others....one sees then a creator that provided the impulse and impetus, order and a guiding law, and then left the development....to the unfolding of this law. Yet what do we mean here by 'leaving', for the order and impetus are everywhere, and the scientist, like the mystic, can if he will, see the hand and face of God, in every act and creature. Most religious people find it entirely acceptable now-a-days to believe that God set up a system in which organic evolution was then able to take place.

Identical views were expressed by Thomas Huxley, well known scientist and friend and defender of Darwin. "The life, the fortune and the happiness of every one of us depend upon our knowing something of the rules of a game infinitely more difficult and complicated than chess. The chessboard is the world, the pieces are the phenomena of the universe, the rules of the game are what we call the laws of nature. The player on the other side is hidden from us. We know that his play is always just, fair and patient. But we also know to our cost that He never overlooks a mistake or makes the smallest allowance for ignorance. To the man who plays well the highest stakes are paid, with the sort of over flowing generosity with which the strong shows delight in strength. And one who plays ill is check-mated-without haste but without remorse. What I mean by education is learning the rules of this mighty game."

There can be no inconsistency between the Maker of laws and the laws He has made. We cannot worship him without obeying his laws. In fact, obedience is only a form, and very often the best form, of adoration,

THE QUALITIES OF NATURE

One remarkable feature of Prakriti is that it is characterised by three Gunas or qualities, namely Sattva (Harmony, Light or Purity), Rajas (Motion, Passion or Activity) and Tamas (Darkness, Inertia or Delusion). At a given time any one of the qualities may be predominant while the other two are more or less dormant. But no creature, not even gods can be altogether free from these qualities. Penetrating every nook and corner of the universe, they may lie concealed in the innermost recesses of the human heart. Says the Gita: "There is no existence here on earth, in the heavens or among the celestials, or anywhere else in creation, which is free from these three qualities born of Matter". (XVIII/40).

All human actions are coloured by one or other of these qualities whether openly or secretly. The author of the Gita has taken great pains to emphasise the all-pervasiveness of the Gunas. Many actions such as Yajna, Tapas and Dana, and acquisitions like knowledge, which are commonly believed to be wholly good and unmixed blessings, may be either Sattvica or Rajasica or Tamsica, depending on the motives which prompt them and the use to which their fruits are put. Tapasya, which includes worship, Japa and meditation, has been classified by Sri Krishna into three grades. "The threefold austerity (of body, speech and mind) performed with supreme faith and without desire for fruit, is said to be Sattvic. The penance which is performed with the object of winning respect, honour and worship and for a ostentation, which is unstable and transitory, is said to be Rajasic. The austerity done under a deluded understanding with torture to the mind, senses and body or with the object of causing injury to another, is said to be Tamasic". (XVI/17-19).

The popular belief is that devotees of God are always pure and purifying like the Ganga. But in the Bhagavata Sri Krishna, speaking to Uddhava, divided them into three grades. "When a man or woman worships Me with great devotion and does his duties without any selfish motive, he or she should be known as possessed of Sattvica nature. When they worship Me for the attainment of their desires, for the sake of wealth and blessings, they should be known as possessed of Rajasica nature; and if they worship Me in order to do injury to others, they are of Tamasica nature."

Similarly it is said that faith is the direct way to God and the panacea for all human ills, But according to the Gita (XVII/2-6), even faith shows the same three shades. The classical examples are Ravana, Kumbhakaran and Vibhishana, whose faith was Rajasica, Tamasica and Sattvica respectively. By long years of Tapasya Ravana and Kumbhakaran acquired a very intimate relationship with God, yet that relationship was essentially fiendish, as seen from their subsequent conduct and character.

Prakriti is not to be confused with Mammon or Devil. Mammon is a person, Prakriti is impersonal. Mammon is the tempter and corrupter of men and enemy of God. Prakriti neither tempts men nor opposes God. It is God's own energy and its manifestation in matter and life. It is God's own will expressed in permanent laws and systems. Mammon is wholly evil, but Prakriti is good, evil and mixed. Though Prakriti is a mixture of three qualities, man is free to choose any of them as the motive force for his actions: and the whole course of religious discipline consists in making this choice wisely at every

step in life so as to make oneself, one's motives and actions more and more Sattvica.

LESSONS OF PRAKRITI

The doctrine of Prakriti, like any scientific theory, serves a double purpose. It accounts for things as they actually occur in the world and it is a useful guide to future action. It explains why in vast areas of the universe only the reign of law is seen and not the hand of the Ruler. Further, by pinpointing the exact cause of an event it enables us to bring about or prevent that event according to our choice. The world of Prakriti in which our days are passed requires education, science and technology; reason instead of blind faith; observation, study and reflection rather than mere revelation. Above all, the doctrine of Prakriti teaches that natural results in the world be obtained by natural means, by right conduct, by proper performance of all duties.

The means must not only be natural but must also be adapted to the particular end in view. The means are as various as the ends, and there is no single or universal means to secure all ends. The seeds and methods for growing gram will never yield cotton; and there are different medicines for small pox and malaria. This is one of the precious lessons of the doctrine of Prakriti and Maharishi Vyasa has laid great stress on it through a remarkable anecdote in the Mahabharata. Yavakrida, son of Bharadwaja, undertook hard penance to gain the grace of Indra. When Indra appeared, Yavakrida told him : "I wish to be more learned in the Vedas than any one has ever been before. It takes a long time and involves much hardship to learn the Vedas from a teacher. I am practising austerities to acquire this knowledge directly." Indra smiled and said, "You are on the wrong path. Return home, seek a proper preceptor & learn the Vedas from him. Austerity is not the way to learning; the path is study & study alone." But Yavakrida would not give up. Indra again manifested himself and warned him. "You have taken the wrong path to knowledge. You can acquire knowledge only by study." Yavakrida did not heed even this warning but continued his penance. Finally, Indra, out of compassion, granted him this boon. "Go and study the Vedas; you will become learned."

Yavakrida studied the Vedas and became learned. He grew vain with the thought that he had acquired the knowledge of the Vedas through the boon of Indra and not through human tutelage. His father Bharadwaja did not like it and warned him. "The gods grant boons to foolish people who persistently practise penance, as intoxi-

cants are sold to fools for money. They lead to loss of self-control and this leads to the warping of the mind and utter destruction. Be not ruined by vanity. Cultivate self-restraint. Do not transgress the limits of good conduct." In spite of this warning Yavakrida took to bad ways and eventually met with an ignominious death on account of his felony. (Mahabharata : Rajagopalachari).

It is clear that neither penance nor the visions or boon granted by Indra could make Yavakrida wise or virtuous.

The Ramayana too has narrated an incident which brings out the need for adopting natural means to accomplish things in the world of nature. The army of monkeys and bears is at the seashore and the problem is how to cross the sea to Lanka. On the advice of Vibhishana, Sri Rama prayed to the Ocean-god for three days. As there was no response, Sri Rama, following the suggestion of Lakshmana, took up his bow to dry up the sea with a missile of fire. Thereupon the god of the sea appeared and explained ; "Dear Ramachandra, earth, air, ether, water and fire – these five elements must follow the eternal laws of their nature. Tempted by pleasure or reward or frightened of punishment, can I ever swerve from my nature ? Can water harden and become stone ? Or can I reduce my depths into a shallow pond for your easy crossing ?" Commenting on this episode, Rajagopalachari writes in his Ramayana : "Valmiki puts into the mouth of the Ocean a fundamental of our religious philosophy. He explains the primordial relationship between God and Nature. God's law operates in and through Nature. The law of nature were created so that the universe may proceed by itself. So too is the law of Karma. The five elements, all objects without life as well as all living creatures must follow their own permanent laws. According to the Hindu Shastras, Nature herself, the sequence and chain of cause and effect, the properties of matter, and the Law of Karma, are all ordained permanently by God. Nature itself is a witness to God; He is not proved by a suspension of the laws of nature".

Those stories teach several important lessons. Transport, food, clothing and other necessities of life must be obtained by natural means and not by prayer, meditation or supernatural powers. Further, there are different ways for obtaining different things and a devotee is not necessarily a good scientist, a skilful farmer or even a man of wisdom. For acquiring knowledge, wisdom or virtue or even the common necessities of life, the appropriate natural; commonsense and practical methods should be adopted, instead of relying solely or largely on prayer and meditation.

For many long years we have hoped to make men wise, pure and good by supernatural means by miracles and mysticism and by appealing to Purusha through prayer and meditation, faith and devotion but without success. Let us now vary the strategy and concentrate on natural means to make men good and pure, diligent and peaceful, loving and helpful. We are surrounded by Prakriti on all sides and our way to God invariably lies through the world of matter. Let us recognise both Purusha and Prakriti and give them what is rightly due to each.

THE LAW OF DISORDER

Another noteworthy characteristic of Prakriti is that it is always in a state of flux or change and the direction of spontaneous changes is always downhill, towards more and more disorder, towards disharmony, discord, evil and wickedness.

There is an important principle of physics known as the second Law of Thermodynamics, according to which heat always flows from hot to cold, that is, in the direction which increases the overall disorder or randomness of the system. In a wider sense, this law applies to all the workings of nature and may more simply be called the Law of Disorder. It means that the universe has a built-in tendency to discord, disorganisation, decay and disintegration. In the words of Bertrand Russell, this law states, roughly speaking, that things left to themselves tend to get into a muddle and do not tidy themselves up again. According to biologist J. A. V. Butler, "The direction in which spontaneous processes occur is always downhill, energy always becomes more dissipated, materials always pass from more organised states to more mixed up states."

Many example of the operation of this law may be seen in daily life. Much skill and effort are needed to grow wheat or cauliflowers but weeds, thorns and thistles just spring up as if from nowhere. Mind wandering is the natural condition, concentration requires will power. Going up is toilsome, going down, automatic. Any organism, if it is to be kept in a State of fitness, regularly needs at least two things : assimilation of fresh food and elimination of waste products. All human families, societies and organisations naturally tend to disharmony, indiscipline and inefficiency, which can be overcome only by constant vigilance, control and direction.

This law has several applications in the sphere of religion.

As a corollary, intelligent effort must be used if it is desired to accomplish anything worth while or to create beauty or order anywhere in the world. And wherever we find order, progress, harmony, beauty,

cooperation or development, it is obviously due to an intelligent force, whether working internally or externally. As the universe and all living creatures, specially human beings, exhibit these properties, we may be sure that the former is master-minded by a Supreme Intelligence, while every living creature has a spark of that Intelligence and Power, which, consciously or unconsciously, directs the life processes and activities of the individual.

Some religions firmly believe that having been created perfect by God himself or his chosen prophet, they will remain so for ever. The truth, however, is that religion, being a human institution, is as much subject to this law as a school, office or factory. With the passage of time the spurious or worn out coins of religion drive out the genuine ones from circulation, the minor injunction supersede the major ones and even excellent principles harden into rigid and lifeless dogmas. This is how faith or belief over-rides reason and action, worship, morality, individual salvation, collective good and a religion whose highest tenet is to see and worship the Lord abiding in all creatures becomes haunted by casteism and untouchability.

Several distinguished thinkers have drawn attention to the decadence of religion in course of time and the consequent need for its regular spring cleaning. Thus Millikan, Nobel prize winner in physics, writes in his *Autobiography*, "In the course of its long evolution religion had all kinds of extraneous ideas associated with it or grafted upon it, some good, some very bad. It has meant and still means in some minds crude superstition, all kinds of man-made theologies, bigotry, intolerance, wars and inquisitions. None of these things are the essence of religion. It is necessary to get rid of all these excrescences and to the essential things." Similar are the views of Arnold Toynbee. In his famous book *An Historian's Approach to Religion* he says, "In the life of all the higher religions the task of winnowing is a perennial one, because their historic harvest is not pure grain."

With remarkable insight the Gita draws attention to the ravages of time in the field of religion and suggests remedies. Now and then the entire structure of religion suffers grievously at the hands of the wicked; and whenever this happens, the Lord comes forth as an Avatar "for the protection of the good, for the destruction of evil and for firmly establishing righteousness" (IV/7). Similarly, with the passage of time previous teachings of religion are sometimes forgotten; as an example Sri Krishna says, "By the great efflux of time this Yoga decayed in the world." (IV/3) Obviously, religion can be kept wholesome and unspoilt only if its precepts and practices are reviewed from time to time in the light of past experience and present knowledge. Every

individual, too, is subject to this law of nature. He can attain any kind of excellence only by exerting himself. "One should lift oneself up", says the Gita, "by one's own efforts and should not degrade oneself. (VI/5) Only by further and continued effort can he retain purity, excellence or perfection, and this is true even if one is a Yogi, a devotee, a man of knowledge or of action. This is why the Gita requires acts of sacrifice, gift and austerity to be performed at all events, for they are purifiers (even) of the wise. (XVIII/5) No person, however great, can afford to rest on his laurels; for as soon as effort ceases, drift and degeneration set in.

Everywhere watchfulness is needed to save religion from relapsing into irreligion or even barbarism. Religious leaders, instead of acting like drain inspectors for other religions, should function as the legendary swan, leaving the water and picking out the milk not only from other religions but even from their own. This means selecting and playing up the teachings which are necessary and useful for all, which call upon every one to improve and develop himself, which promote goodwill and friendliness among individuals, among nations and, above all among religions. It also means weeding out or playing down the dogmas which contradict reason or known facts, which lower human responsibility or divide mankind into warring camps in the name of God.

Accordingly, each religion should bring out new adaptations of its teachings to meet the requirements of different sections of society. In particular, there should be a simple version for children and adolescents, another for grown-ups and elderly persons, and a third, an expert or world edition, for scientists philosophers, thinkers, sceptics and intelligentsia generally, all over the world. These modernised world editions of the teachings of each religion will include only their best parts, which have stood the test of time and can bear scrutiny by critical but understanding people, including those belonging to other religions or to no religion. Clearly, this task of religious reinterpretation requires seers who are gifted not only with faith and devotion but also with wisdom and vision.

CONCLUSION

The doctrine of Prakriti is one of the profoundest and most fruitful contributions of Hinduism to the philosophic thought of the world. The amazing success of science is proof of this doctrine and a promise that by applying it to the moral and spiritual sides of life humanity can be transformed.

To get anything worth while in the world of nature natural means must be adopted. Austerities, prayer and meditation are not the

proper way to acquire knowledge, wisdom, virtue or the goods of life.

Nothing in creation is free from the three qualities of Sattva, Rajas and Tamas. The character, conduct, knowledge, faith and even devotion and meditation of a man cannot be taken at their face value but may be essentially Rajasic or Tamasic, depending on his motives and what he does with his attainments and possessions.

Intelligent effort is required to improve thing or keep them in a state of fitness. Even men of knowledge, yogis and devotees can remain in a condition fitness only by continually giving themselves away through works of austerity, sacrifice and charity.

The precepts and practices of religion need to be kept under constant review in order to weed out the undesirable accretions and distortions and highlight the important and useful parts.

The Gita has laid the greatest stress on the proper understanding of the doctrine of Prakriti. In two remarkable verses it says : "He really sees who sees all actions being done in all respects only by Prakriti and the Self as the non-doer. He who thus knows Purusha and Prakriti with its qualities, though engaged in all kinds of works, is not born again." (VIII / 29, 23). Atheists deny Purusha; theists deny Prakriti and religious leaders, even in India, have not taken due notice of the division between Purusha and Prakriti; and this is one of the major causes of the decline of religion and the spiritual backwardness of mankind.

One obvious objection to this explanation is that if Purusha is only a silent witness and if prakriti is not responsive to prayers, how can we account for the wonderful benefits which many people are known to have obtained through prayer and worship ? Our present knowledge is not sufficient to answer this question. But it is noteworthy that not all prayers are heard. Perhaps there is a higher law, which we have yet to discover governing the results of prayers. But clearly in the management of our life we have to depend on our own efforts in accordance with the universal laws of nature rather than on the rare and uncertain exceptions to those laws obtained through superhuman agency. Moreover, the exaltation of Prakriti does not imply the belittling of Purusha. Both must be worshipped by appropriate methods. The common man needs two kinds of worship : one by conventional methods like prayer and japa, the other by secular works. Proper union with God is possible only when worldly activities are performed as an adoration of the Lord, for his sake and pleasure and for the good of his creatures. Man's spiritual development requires not only

prayer and meditation but also right conduct, proper performance of duties and obedience to the laws of nature—physical as well as moral. The Gita's injunction is : At all times remember Me and do your duty. A modern writer has said the same thing in different words : Work as if everything depends on you and pray as if everything depends on God.

संगच्छध्वं संवदध्वं सं वो मनांसि जानताम्
देवा भागं यथा पूर्वं संजानाता उपासते ।

ऋग्वेद १०।१६१।२

Your thought should be in harmony with each other, your speech should be in harmony with each other, your action should be in harmony with each other. This is how your elders realizing their responsibility played their part in society.

Fig. 10. 191. 2

The Self in Nyaya Philosophy

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According to Nyaya philosophy the knower cannot be the body, the senses, the Pran or the mind. Nor can it be the series of conscious states and feelings. The permanent self is the knower and without the permanence of the substratum of knowledge and the personal identity of the self, knowledge and its various forms remain inexplicable. That which has a transitory being can not be the knower. The self can not, again be of intermediate dimensions for obvious reasons stated above. The existence of the self as the substratum of knowledge is proved by desire, aversion, conative effort, pleasure, pain and consciousness. The self can be defined as that which has all these phenomena as its distinguishing qualities, for desire and the rest are produced in the self only. Hence they are the special attributes of the self. In opposition to the Buddhist Conception of the self as a stream of consciousness, Nyaya proposes to prove the existence of the permanent self by the following inference. A quality must inhere in some substratum. Desire etc., are qualities. So they must inhere in a substance. It is a case of *Samanyatodrista* inference, because the universal relation between the probans and the probandum can not be established by normal perception. But that a quality inheres in a substance is established by perception. Colour which is perceptual must inhere in some substance. So the fact the willing and the remaining qualities must reside in some substance. Thus the self as a substance is proved by inference.

It has been said that the pure self is inferred and not perceived. The self can not be perceived because it has no perceivable quality. Though the self is perceived as the 'I' amidst the cognitions 'I am happy' etc., still it is not perceived as the pure self. *Vatsyayana* distinctly states that the pure self as unrelated to the body and as free from the six attributes of desire, aversion, conative effort, pleasure, pain and knowledge can never be normally perceived, although it is an object of extra ordinary perception. Kanada also says that the self and the mind can not be perceived.

The pure self in *Nyaya* is simple, permanent spiritual substance. It is a substance that exists by itself. Consciousness as an attribute presupposes a subject to which it belongs; Therefore the self is to be regarded as the substance which forms the substratum of consciousness.

The self is simple, meaning that it is devoid of parts and consequently it is not extended in space. That which has parts is destructible. If the self itself be destructible salvation will be impossible. We can not do away with the conception of emancipation. It is undeniable that life is a chequered play of joy and sorrow, and its portion of sorrow far outweighs the joy it enjoys. Liberation is a state which is absolutely free from pain. Pressed by the pangs of sufferings, man will naturally seek for emancipation or escape from the sufferings of life. Therefore a permanent self that suffers and desires escape from suffering must be admitted. If the self be transitory, then memory and recognition can not be explained. More over, the moral law – the law of *Karma* and its deserts holds everywhere. That what we get we deserve because of our own *Karma* quite as much what we lose we also deserve for the same reason. Thus there is no getting away from our moral desert, from the *adrsta* moral cause and its operation. What is done can not be undone and must be patiently borne, as also what is not sown never reaped. Therefore *adrsta* holds everywhere. That is, the *adrstavat* Atman or the self as the substrate of this, supra-sensible moral cause must also be everywhere. This proves that the self is ubiquitous. It is also ubiquitous in the sense that if it be atomic, cognition inhering in it will not be directly known in internal consciousness. For an atomic substance is imperceptible. And if the substance itself be imperceptible, its qualities can not be perceived. Again, it can not be of perceivable dimensions. For all substances having perceivable dimensions come to end. Lastly it is a spiritual substance. Though it is conjoined with the material body, it is not completely immersed in the body. By a spiritual substance is meant that which can be a substratum of consciousness. Consciousness as a quality inheres only in the self. It can not belong to anything material. Therefore consciousness belongs to the self. The nature of the self in Nyaya is wholly immaterial.

India in the Holy Bible

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In their known history, the Hebrews have come into frequent and intimate contact with ancient Iranians. It is, therefore, very much possible that they might have borrowed a substantial portion of their mythology, religious and philosophical beliefs and rituals from them. In this connection, the following observations of Arthur Schopenhauer,¹ the renowned German philosopher are worth mentioning :

“... Jehovah is a transformation of Ormuzd and Satan of his (that is, Ormuzd's) inseparable Ahriman...”, and “In the teachings of the zend Avesta (from which Judaism is known to have grown), the pessimistic element is represented by Ahriman....”

The known and recorded history of the Hebrews does not mention their explicit mutual contact with the ancient Indo-Aryans. But it should be within the realm of reason to speculate that they must have come, at least indirectly, in contact with the Indo-Aryans via Iranians. It may be mentioned here that the ‘Book of Esther’ (Old Testament) explicitly mentions a mighty king Ahasuerus who ruled from India upto the province of Ethiopia, the Holy city of Jerusalem being a part of his kingdom. It being so, furnishes strong ground to infer that the Jews must have come into direct contact with the Indians in pre-historic times.

We can reach the same conclusion by having a look into Islamic beliefs and traditions also which share a lot with their Jewish counterpart. In accordance with the Islamic traditions, Hazrat Adam came first to India after his fall from the Garden of Aden.² It is then quite logical to infer that Hazrat Adam and at least his immediate progeny must have stayed in India for quite a considerable time before spreading to other parts of the world. In this way, the accounts of Adam and his immediate progeny, i. e., Abraham, Nuh, Beleg, etc. may be unhesitatingly treated as part of ancient Indian history. We will consider them one as follows :-

(1) Jehovah

The Encyclopaedia Americana, 1966, in its discussion of the term, Jehova, maintains that, ‘there has been much speculation as to the origin and meaning of the term. Attempts to connect it with any Indo-European deity or to trace it to Egypt, or China or efforts to identify it with other Semitic divinities have not been successful’.

The present author, however, does not agree with the above mentioned observation. This word may be equated with the Vedic word, 'Jahvuh', which may be considered grammatically both as an adjective and/or a proper noun. In the former sense, the word, Jahvuh has been used at least four times in Rkveda.

- (i) In Rigveda III, 1, 12; the word, Jahvuh, has been used as an attribute of Lord Agni.
- (ii) In Rigveda VIII, 13, 24; this word has been used as an attribute of Lord Indra.
- (iii) In Rigveda IX, 75, 1; this word has been used as an attribute of Lord Soma.
- (iv) In Rigveda X, 110, 3; this word has been used again as an attribute of Lord Agni.

The word, Jahvuh, in Vedic Nighantu, has been used as synonym for (a) water (N/1/12); (b) power (N/2/9); and as an adjective mean 'Great' (N/3/3 & N/8/8).³

We may also consider the word, Jehova, in the following way. This word is spelt as JHVH in Hebrew. It may be mentioned here that the Hebrew script, like Arabic and Kaithi scripts, does not use the vowel signs to indicate the pronunciation of its consonants. If we insert the vowels 'a' and 'u' after the consonants J and V respectively in this word, then it becomes the Vedic term, Jahvuh which has already been discussed above.

(2) *Adam*

This word seems to have been derived from the Sanskrit word 'Adityam' in the following way:— The Vedic pronunciation of this word is Aditiam. If we remove 'ti' from this word (vide our discussion of the word, Matri, in this essay), then this word becomes Adiam. If we delete the vowel sound, 'i', then this word becomes 'Adam'; and if we delete the vowel sound 'a', then this word becomes 'Adim'. It means that both the words 'Adam' and Adim may be considered to have been derived from the original word, 'Adityam'. The second derivation 'Adim' is a Sanskrit word which means 'the First, Primal'. This may lead us to infer that 'Adityam' or 'Adam' was the progenitor of our race. The progenitor of our race was named 'Adityam', because he was, according to the Hindu scriptures, the son of the goddess 'Aditi'. Hence another synonym of 'adityam' or 'adam' may be 'Aditi-tanaya', i.e., 'son of Aditi'. The word, Adoney, seems to be a corrupt derivation of the term, 'Aditi-tanaya'.

INDIA IN THE HOLY BIBLE

In Sanskrit, the term, 'Aditi' is another name of the 'Mother Earth'. Now see the following passage from the 'Genesis' 24, old Testament :

'And God said, Let the earth bring forth the living creature after his kind, cattle and creeping thing, and beast of the earth after his kind and it was so.'

(3) *The Garden of Aden*

The word, 'Aden' seems to have been derived from the Sanskrit word, 'Adityan' (i. e., the land of the Adityam, i. e., the hand of the Sun) in the following way :

Adityan

=Adyan ('i' disappears; Rule of Stress),

=Adian (ya=i+a).

=Adan ('i' disappears; Rule of stress).

=Aden, or Eden. (Matter of pronunciation and spelling).

It may be specifically mentioned here that Shri R. N. Mirza, based on his own reasoning (other than etymological) has reached the same conclusion. This has been pointed out by Sir C.P. Ramaswamy Aiyar⁴ in the following words :

'Prof Darmsteter and Prof. Grishnan have thrown considerable light on the whole question but perhaps, as pointed out by R. N. Mirza in a 'Central Asian Study' (the Land of the Sun or the Garden of Eden), the greatest illumination has been derived from the archaeological and literary work of the Russian professor, T. S. Tolstov and his colleagues'.

Now let us consider the word, Adyan derived from 'Adityan'. This word may be pronounced as 'Odyan' and thence change to 'Udyan' (a=u). The word, Udyan, means 'Garden' in Sanskrit. This is perhaps why, the Genesis describes 'Adityan', i. e., 'Aden' as the Garden of Aden.

(4) *Abraham*

This word can be derived from the Sanskrit word, 'Brahma' in the same way as 'Astation' and the Persian word 'Abru' are derived from 'Station' and the Sanskrit word, 'Bhru' respectively. It may be mentioned here that, in India, every Hindu family, particularly Brahmin, seeks to trace its genealogical roots from Lord Brahma. Similarly with Abraham. To mention that the New Testament traces the genealogy of Jesus Christ from Abraham.

The name of the wife of Abraham was Sarai or Sarah. It can be shown that this word has been derived from the Sanskrit word,

'Sarasvati'. If we remove the suffix, 'Vati' from this word, then it becomes 'Saras' which may change to 'Sarah' or 'Sarai' easily. According to Hindu traditions Sarasvati is said to be the daughter of Brahma, who allured by her physical charms, tried to deflower her. This story is told in the Bible with respect to 'Lot' (the son of a brother of Abraham) and his two daughters in rather a different way.

(5) Beleg

The old Testament mentions one Beleg, 'in whose time the land was divided'. 'Beleg' may be comfortably identified with the great Asura king, Bali, who, according to Hindu traditions, was deprived of his kingdom through the tricks of Lord Visnu, to be later sent to 'Patala'. It may be mentioned here that the essence of the story is the same in both the accounts, though the details differ.

(6) Nuh or Noah

The Biblical 'Noah' and the account of deluge as given therein, clearly corresponds to that of Indian king Manu and the account of Pralaya as given in the Satapatha Brahmana.

According to Hindu traditions, a compendium of law, known as 'Manusmṛti' is attributed to Lord Manu. Similarly the Hebrews have their 'Noah's Laws' as its counterpart. Now we may consider 'New Testament'.

Arthur Schopenhauer⁵, after a careful and comparative study of New Testament and Hindu scriptures, gives his considered opinion that: "the New Testament, however, must somehow be Indian origin, as testified by its thoroughly Indian ethics (indische Ethik) with morality culminating in ascetism, its pessimism and its (theory of) Avatar For when the aforementioned Indian doctrine reached the soil of the Holy land, then arose the task of unifying the knowledge of the corruption and sorrow of the world, its yearning for redemption, and salvation by virtue of an Avatar—the ethics of self-denial and atonement—with the Hebrew monotheism and its 'all was very good' (optimism) For the spirit of the Indian wisdom is to be felt in the New Testament like the fragrance of flowers from distant tropical lands drifting over mountains and streams. . . ."

Now we would discuss three key-words, 'Mary', 'Jesus Christ', and 'Joseph' from the New Testament.

(i) Mary

This word seems to have been derived from a Sanskrit word, 'Matr' pronounced as Matri in the following way. Sometimes, the sound

't' is left unpronounced perhaps due to Multiple dyslalia.⁶ For example the words, 'Water' and 'Butter' may sometimes be pronounced as "wa'er", and "Bu'er" respectively. Another example, the Sanskrit word, 'Prati' become 'per' in English. On the same pattern, the word, Matri, may be pronounced as "Ma'ri." Then the word, 'Mary' is only a matter of pronunciation and spelling. Again, if we add the suffix, 'am' to the word, 'Matri', i e., (Matri+am), then it may, on one hand, become 'Mataram', and on the other hand, 'Mariam.' Thus we can see that the words 'Mary' or 'Mariam.' have been derived from a Sanskrit word, 'Matr' meaning 'Mother.'

(ii) *Jesus Christ*

We know that the Bengali pronunciation of the word, 'Krsna' is 'Kristo.' 'Christo' or 'Christ' is only a matter of pronunciation and spelling. The word, Jesus, can be shown to have been derived from a Sanskrit word, 'Isah', i e., 'Lord.' Thus 'Jesus Christ' comes to be the equivalent to 'Lord Krsna.'

In accordance with Indian traditions, Krsna was killed by an arrow aimed at him mistakenly by a Vyadha; while according to the New Testament, Jesus Christ was crucified by a Vadhika. It may be observed here that it is only the details which differ in both the accounts; otherwise the core of the story is the same; also that there is a little difference between a Vyadha and a Vadhika, in that the former kills animals and birds in the forest while the latter executes the human beings on the gallows.

It may be proved from a few cross-references from some Indian scriptures as compared with those of New Testament that 'Jesus Christ' and 'Vasudeva Krsna' are the names of one and the same person.

(iii) *Joseph*

Let us first consider a hypothetical ancient Indian name, 'Jayasva.'

We know that the Bengali pronunciation of this word, is 'Joyasva.' Sometimes, the sound, 'ya' is pronounced as 'a.' For example, the word, 'Nayi' in Hindi is pronounced as 'Nai;' another Hindi word, 'gaya' is pronounced as 'ga.' Still another word, 'khoya' is pronounced as 'Joa;' and the word, 'Joyasva' as 'Joasva.'

Again we know that some persons cannot or do not pronounce half consonants, or consonants without the aid of vowels. For example, the Punjabis would pronounce the words, 'Station' and 'Putra' as 'Satation' and 'Puttar' respectively. Following this rule, the word, 'Joasva' may be pronounced as 'Joasava'.

Also that the sound 'va' may sometime be changed into the sound, 'p', and thence to 'ph' or 'f'. For example, the Sanskrit word 'Asva' becomes 'Aspa' in Zendavestan; and the Sanskrit word, 'Asvahan' become 'Isfahan' in Persian. Following this rule, the word, 'Joasava' may be transformed into 'Joasaph'; from which the derivation of the word, 'Joseph' is a simple matter.

Thus we can see that the Biblical name, 'Joseph' can be derived from a hypothetical ancient Indian name, 'Jayasva'. At present it would be difficult to show a correlation between those two words. We may, however venture to indicate here that the original name of the 'Mahabharat' was 'Jaya'.

(iv) By the way, we may also consider another hypothetical ancient Indian name, 'Yasasva'.

It is an elementary rule of Sanskrit grammar that the sound, 'v' is produced by compounding two basic vowel sounds, 'u' and 'a'. Following this rule the word, 'Yasasva' becomes 'Yasasua' which may further be transformed into the word, 'Yahasua' or 'Yehasua' due to a rule according to which the sound, 's' changes into the sound 'h' as in (Sindhu into Hindu, etc.).

It follows from the above that the word, 'Yehasua' has been derived from a Sanskrit word, 'Yasasva'. It may be mentioned here that 'Yehasua' is the personal name of the present Israeli consul in India at Bombay.

HEBREW AND VEDIC TERMS FOR 'WORSHIP'

Please see the following passage from p. 42 of the book 'Jewish Festivals' by Mr. Hayyim Schauss :

"In fact, holy services in the sanctuaries were called '*Easting before God*' and '*Being merry before God*'.

COMMENT

One Sanskrit word for 'praying to God' is 'Upasana' which may be considered to have been formed by joining two words, 'Upa' and 'asana'.

One of a number of meanings of the prefix 'upa' is 'near' the root 'as' of the word, 'asana' stands for a multitude of ideas and concepts, of which the most relevant in the present context are 'to be present', 'to sit' and 'to study'. Thus the Sanskrit word, for 'worship', i. e. 'Upasana' means, 'to be present before God', i. e., 'sitting before God', or 'studying before God'.

But if the root-word, 'as' is pronounced as 'as' due to some inavertence or just a slip of tongue, the word 'upasna' becomes

'upasana'; and gives an altogether different meaning which is similar to the Hebrew word for the same idea. Let us see, How ?

The meaning of the root-word, 'as' in Sanskrit is 'to eat' and 'to enjoy', or 'to be merry'. Hence if we pronounce the term, 'upasan' as 'upasana', then it would come to mean, *Eating 'before God'*, and *'Being merry before God'*.

We may consider another Sanskrit term, 'Yajana' in the present context. The Zendavestan form of this word is 'Yasna' which comes 'Jasna' (Y=J) in later Persian. The meaning of the word 'Jasna' in Persian is 'Festivity' or to 'make merrymen'. by which we may speculate that one of the original meanings of the Sanskrit word, 'Yjana' would have been *'Being merry before God'* also.

By the way, it would be amusing and instructive to consider another set of two Sanskrit words, 'Bhajan' and 'Bhojan' in the same context. There is a little phonetic difference between these two words. In fact, these two words are pronounced almost similarly in Bangali language. But the meaning of the word, 'Bhajan' is 'worship' or 'to worship'; while the word, 'Bhojan' stands for 'food' or 'to eat the food'.

We may also consider the following verse I, 164,20 of Rig Veda in the same context :

"There are two Birds (friendly to each other) sitting on a tree. One of them (the soul) eats delicious Pippal fruit while the other Bird (the God) eats nothing. The latter only watches the former".

It may also be mentioned here that, like a devoted Jew, a devout Hindu is also required to pray three times a day. (Trikalik Sandhya).

Now our readers are requested to see the following excerpt from the same book, 'Jewish Festivals'; p. 64 :

"When all is ready, the Samaritans form groups about the sacrificial animals and after uttering the prescribed blessing, fall upon the roast meat, pulling it hastily to pieces with their hands. Portions are brought to the women and children in the tents. Every body eats rapidly and in twenty minutes all that is left is a mound of bones".

COMMENTS

The following observations may be made in the above context :

(i) Though turned largely vegetarians now, the Brahmins of India present almost similar scenes of eating hastily in our religious and ritual grand-feasts.

(ii) Like Hebrews, the Hindu womenfolk also sit, in seclusion to eat their shares in our public feasts.

(iii) Any person, who eats too rapidly (hurriedly/impatiently), or too much, is called a '*Haboru*' in Hindi language, particularly in its Avadhi dialect. It may be observed here that the word, '*Haboru*' is of an indigenous origin, i. e., it has not been borrowed from any alien language. Please note the striking resemblance between the words, '*Habotu*' and '*Hebrew*'.

It may be interesting to mention Prof. Kaegi, a great German scholar of the Vedas, who had detected about 130 specific references from Rigveda which resemble closely about 250 Biblical passages astonishingly with respect to their thought-content and even language. We beg to quote the following observation of Prof. Kaegi in the preface to his '*Rigveda*' translated by Arrowsmith published in 1880.

"If, especially in the treatment of Varuna, I have somewhat more fully followed out the similarities of the Vedic and the Biblical language (. . .), I shall now hardly have to meet the criticism that in so doing non-Indian, or even Christian, conceptions are put into the Veda; translation stands beside translation; it is left to the reader to prove similarity, as well as difference".

We would like to present here the Vedic and Biblical concepts and accounts of creation. Let us first see how the Genesis describes it :

1. "In the beginning God created the heaven and the earth.
2. And the earth was without form, and void; and darkness was upon the face of the deep. And the spirit of God moved upon the face of the waters.
3. And God said, let there be light : and there was light.
4. And God saw light, that it was good : and God divided the light from the darkness
5. And God called the light, Day. and the darkness he called Night. And the evening and the morning were the first day.
6. And God said, "Let there be a firmament in the midst of the waters, and let it divide the waters".

Now compare the above with the first five verses of the 129th hymn of the tenth Book of Rigveda :

1. "There was not non-existent nor existent : there was no realm of air, no sky beyond it.
What covered in, and where ? and what gave shelter ? Was water there, unfathomed depth of water ?
2. Death was not then, nor was there aught immortal : no sign was there, the day's and night's divider.
That one Thing, breathless, breathed by its own nature : apart from it was nothing whatsoever.

3. Darkness there was : at first concealed in darkness this All was indiscriminated chaos.

All that existed then was void and formless : by the great power of Warmth was born that Unit.

4. Thereafter rose Desire in the beginning, Desire, the primal seed and Germ of Spirit.

Sages who searched with their heart's thought discovered the existent's kinship in the non-existent.

5. Transversely was their severing line extended : what was above it then, and what below it ?

There were begetters, there were mighty forces, free action here and energy up yonder. (Translation; by Griffith).

A comparative examination of the two accounts of creation as given in the Genesis and Rigveda. instantaneously reveals in them a close and almost similar and identical trains of thought,

CONCLUSION

It should have been clear from the above discussion that this essay presents a strong case to suspect or speculate that either the Hebrews belong to a branch of Vedic Aryans, or they had been definitely in direct touch with the latter, in some remote and unrecorded period of their history, to have exchanged the words and ideas so closely. Hence the need for further research.

We would like to conclude this essay with the following observation of Prof. Schopenhauer:—

'I cherish the hope that some day will arise the Biblical scholars conversant with Indian religions, who will be able to prove their (Indian religion's) kinship with Christianity in terms of quite specific features.....'

REFERENCES

1. SCHOPENHAUER (Arthur). Concerning religion: some excerpts; tr. by Dr. S. Subhash Chandra. *Prabuddha Bharata*; March 1976; pp. 150-54.
2. MAULANA SAYYAD SULEMAN NADAVI. *Arab aur Bharata ke sambandha*; tr. by Babu Ramachandra Varma. Prayag, Hindustani Academy, 1930. pp. 1-3
3. GANGAPRASAD. *Dharmon ka adi-srota*.
4. SIR C. P. RAMASWAMY AIYAR. Foreword to the book. 'The Aryan Ecliptic Cycle by H. S. Spencer. Poona, Vaswani, 1965'.
5. Schopenhauer (Arthur), *Ibid*.
6. COMPTON. *Spoken English*.

Book Reviews

(1)

Tulsi ke Kavya ka Manovagyanik Vishleshan (Hindi) : Dr. Ambika Prasad Vajpai, M. A., Ph. D., D. Litt., Reader, Hindi Department. Publisher : Gurukula Kangri Vishwavidyalaya, Haridwar. Price : Rs. 40 00

Originally a Ph. D. thesis, the book is a psychological study of the poetry of Tulsidas. It contains valuable information regarding psychological background of Tulsi's works. The treatment is unique and interesting. The author has tried to fuse literature and psychology together, and has co-related his analysis with modern psychology. The get up is nice.

—Editorial Board.

(2)

Reetikal ke Dhvanivadi Hindi Acharyon ka Tulnatmak Adhyayan (Hindi) : Dr. Vishnu Dutt 'Rakesh', Publisher : Sahitya Bhawan Pvt. Ltd., Allahabad, 1977. Price Rs. 30/- only.

Books on the principles of literary criticism were written in the Vraja dialect between the 17th and the 19th centuries. In Sanskrit, we have Anandvardhana's *Dhvanyalok* and Mammata's *Kavya-Prakash* as the monumental books on Dhvanivad (suggestive meaning). On the same pattern, Kulpati Mishra, Somnath, Kumarmani, Shripati, Bhikharidas, Pratap Sahi, Gwal, Janaraj, Soorti Mishra and Nanu Ram 'Kavisagar' wrote important books in the Vraja. They are to be distinguished from the Sanskrit Acharyas in that they derived definitions from the Sanskrit Acharyas, but put forth their own illustrations. Panditraj Jagannath's *Rasa-Gangadhar* and Kulpati Mishra's *Rasa-Rahasya* are substantial works. In Hindi, the first man to analyse the Dvani principle was Kulpati, the great disciple of Panditraj Jagannath.

In the book under review, the author has made a comparative study of the principles propounded by Sanskrit and Hindi Acharyas. After studying about eighteen non-accessible manuscripts, he has drawn conclusions of far-reaching significance. This study throws new light on Rasa, Alankar and Nayikabheda. It is 'classical' in itself. and Dr. 'Rakesh', a profound analyst of Poetics, has examined the facts with all sincerity and detachment. This book will be of great help to the reader in understanding and appreciating the erotic poetry.

This book is the published version of the author's D. Litt. dissertation. It has been written with a vast knowledge of the subject. I believe that it will be acceptable to the literary circles as a reference

conclusive. There are also five appendices in it, making the book all the more useful and interesting. Select Bibliography and Index are the additional items of the book.

The book is written with a specific purpose in mind : to meet the long-felt need of the academic circles. Philology is taught as a paper in many leading Indian Universities, and it can be unhesitatingly said that this book will fulfil their requirements. Though there are quite a few books on the subject both by foreign and Indian scholars, they are not so exhaustive and to the point as Dr. Dwivedi's. In this book Dr. Dwivedi has incorporated his vast readings in the English language and given an idea of his scientific temperament. The treatment of the subject is simple and direct, without any recourse to superfluities, ambiguities and repetitions. Dr. Dwivedi, indeed, deserves handsome compliments for bringing out such a remarkable book on a tough subject like Philology.

Finally, the publishers, printers, proof-readers, and binders have done their respective jobs satisfactorily. The book has a glittering get-up to attract the readers.

—D. C. Gupta

Head of the Department of English

Sahu Jain P. G. College, Najibabad, (U. P.).

(5)

Vedon Ki Varnan Shailiyan (in Hindi) : Dr. Ram Nath Vedalankar, Acharya, Gurukula Kangri Vishwavidyalaya (Hardwar), Shraddhanand Shodh Sansthan, Gurukula Kangri, Hardwar, pp. 342, Rs. 50.00.

Originally a Ph. D. thesis submitted to the Agra University, the book tries to focus on the styles of the *Vedas*—symbolic, autobiographical, conversational, question-answer, and other styles, are dealt with in detail. It is a 'scholarly work' of the author. Every chapter of the thesis shows the author's wide study and critical acumen. Quotations from the *Vedas* are admirably chosen and are followed by translation and interpretation. The writer successfully attempts to bring home the point that even prayers, dialogues, evocations, tales have stylistic and semantic values in the *Vedas*. The author has tried to perform the dual job of the linguist and the literary critic, and in his field deserves attention for a pioneering work. He himself has tried to interpret many Vedic *Mantras*. His interpretations are searching and original. Most of the conclusions are original. The Language is simple, and style chaste.

Dr. Vedalankar deserves congratulations for his work though it requires some improvement from editorial points of view.

(6)

Christopher Fry as a Dramatist : Dr Radhey L. Varshney (Dept. of English, Gurukula Kangri University, Haridwar). Publisher : Student Store, Civil Lines, Bareilly, 1977, pp. 160, price Rs. 18.00

It is one of the rare books, the only full and comprehensive book on the only living dramatist who will be a 'classic' in the future. It deals with almost all the major aspects of Fry's dramatic art and thought such as his 'Themes and Characters', 'Language and Verse', 'Imagery', 'Humour', 'Vision of Life' (Philosophy), 'Place and Contribution', etc. It also discusses in detail all the plays of Fry including his latest play, 'A Yard of Sun' in a separate chapter entitled, 'The Plays of Christopher Fry : A Discussion on Plots'. Whereas the first chapter introduces Fry's Life and Works, the last one is a summary of all what has been said in the earlier chapters. Then there is a chapter (Second) which reveals to the readers the nature and conception of Fry's drama. The author has made explicit Fry's concept of comedy and tragedy elaborately, developing his exposition from the views of Christopher Fry expressed by him in his talks, essays and radio broadcasts.

Apart from this, the work has a comprehensive Bibliography and Index and Appendices of the photocopies of Fry's Letters to the author.

Originally a Ph. D. thesis, supervised by eminent scholars like Miss A. G. Stock and Dr R. K. Kaul, and worked out admirably, it has a flavour of a book and the taste of scholarship. Its additional beauty is its chaste, lucid and graceful style. The language is simple, thought clear, argument logical, and the style is remarkable for its brevity. The author, Dr. Varshney, has an additional advantage of corresponding with Mr. Christopher Fry and his Secretary Miss Adza Vincet, and has consulted even the most rare material on Fry.

Produced nicely, it is a 'promising' work and has been hailed with laurels by scholars and critics. Some of the opinions about this book are cited below:—

1. 'Mr Varshney's extremely well written thesis. . . . Mr Varshney's analysis as well as interpretation of the plays is diligent and judicious. He has displayed a mature critical sensibility and his line of argument is clear, lucid and uncluttered with critical jargons. Most of his conclusions are original and have been arrived at through scholarly methods of analysis. Almost every page of his

thesis testifies to his devoted study of the plays. The mechanical requirements of the thesis have been fulfilled to perfection. . . .'

Dr Salamat Ullah Khan

Professor of English, Aligarh Muslim University.

2. 'I have great pleasure in introducing this book on Christopher Fry. I supervised the dissertation which Dr Varshney has recast in the form of a book. I was greatly impressed with the enthusiasm and energy of the author. . . . Dr Varshney spared neither money nor pains to bring his work up to date. There is a scarcity of such publications on Mr Fry. I believe that scholars will find Dr Varshney's book very useful.

'A reader may disagree with Dr Varshney's estimate of Fry's dramas but he cannot help being grateful for so much information.'

Dr R. K. Kaul

M. A. (Oxford), Ph. D. (London)

Professor & Head, Dept. of English,
Rajasthan University, Jaipur.

3. 'Dr Varshney, who has had the advantage of communicating with Mr Fry, has no difficulty in establishing that the range and complexity of Fry's work as a dramatist is more than flippant and self-regarding, more than a 'theatre of words'. Patient, independent conscientious studies of western writers are still rare in this country. Though respectful, Dr Varshney's is one of those rare works. . . .'

Dr Sisirkumar Ghose

Professor & Head, Dept. of English,
Vishwabharati University, Shantiniketan.

4. "Dr Varshney's book is greatly needed; and it will become even more valuable as Christopher Fry grows into a classic. I have no doubt whatever about that. . . . Dr Varshney's analysis has been at once searching and persuasive. I admire, in particular, his chapter on imagery. Fry's extraordinary and unexampled gift that made us catch our breath in the London Arts Theatre on the first night of *The Lady's Not for Burning*. . . .

"Dr Varshney's quotations are admirably chosen. He has (I repeat) written a book about the only living dramatist who will assuredly be a classic; and for this we must be rightly grateful. Certainly I am; and I can quote from *A Yard of Sun* :

The heart has been roused up
 You hear the ground under you purring again,
 Warm, like a cat's back.

. . . . Dr Varshney helps us to get to the heart of intricacy, a task—exciting and rewarding—for all who love the drama, the word, and the dramatist, and who will love them in the generations yet unborn.”

J. C. Trewin

Drama Critic to 'The Illustrated London News,' 'The Observer,' Hampstead, London.

Opinions kept aside, every reader will enjoy reading it, and students and scholars of Fry will find it not only useful and rewarding but also informative and persuasive.

(7)

An Introductory Textbook of Linguistics and Phonetics : Dr. Radhey L. Varshney. Publisher : Student Store, Bareilly, 1977, pp.450.00, Rs. 25.00.

The only, perhaps the first worthwhile book by any Indian fusing the Indian and Western approaches of linguistics, it attempts to introduce to College and University students and language teachers the basic concepts of linguistic sciences. It tries to introduce a complex and difficult subject in a simple manner.

The scope of this book is quite large. Beginning with the definition of language and linguistics, it tries to analyse why linguistics a science. Then it discusses linguistic levels, concepts, fields, aspects, branches and applications of linguistics. There is a comprehensive section on Phonetics and Phonology. Then there are separate chapters—'Psycholinguistics', 'Sociolinguistics', 'Stylistics', 'Lexicography', 'Translation', 'Linguistics and Language Teaching' beside those on 'Morphology', 'Grammar', 'Graphics and Graphology', 'Syntax', etc. The book also gives a comprehensive survey of the history of linguistics from the ancient Vedic period through the ancient Greek and Roman grammarians to the modern Western linguistics.

The author (Dr. Varshney) has spared no pains in making his book up-to-date and palatable and claims no originality except that of designing and relating the facts. He has tried to do the work of a team singly, hence deserves congratulation and encouragement. As mentioned by Dr. S. K. Verma, Professor and Head, Dept. of Linguistics &

Contemporary English, Central Institute of English & Foreign Languages, Hyderabad, Dr. Varshney's is 'a bold step in the right direction.' Besides the Introduction of Dr. S. K. Verma, the book also contains a scintillating Foreword by the Vice-Chancellor of Gurukula Kangri University who commends the book not only to students and teachers but also to linguisticians and general public.

In the book, the author has not tried to escape even from the most difficult aspects of linguistics. In the section on Syntax, he has dealt not only with the traditional grammars but also with the modern 'Immediate Constituent Analysis' of the Structuralists and the contemporary 'Transformational-Generative Grammar' of the Mentalists. In the book, there is a detailed discussion on T. G., Chomsky and concepts such as 'Langue & Parole', 'Form & Substance'. It also incorporates a chapter on 'Language (linguistic) Universals'. It will, indeed, prove to be a useful book. The publishers have produced the book very decently and with a very fine get-up.

(8)

The Vedas & Their Teaching : Swami Dharmananda Saraswati
Vidya Martand. Publisher : Vishwa Ved Parishad, 1976.

This small booklet has been written in an easy and simple English in the form of questions and answers to give general ideas about the Vedas and their teachings. It tries to answer questions about the themes, the date of composition, the composers and the importance of the Vedas. It provides answers to 17 questions some of which relate to the practical aspects of life such as drinking and meat-eating, material and social sciences, etc. In question no. 14, it tries to summarize the principal items of Vedic philosophy and answers to question nos. 5, 6 and 10 relate to the teachings of the Vedas.

Since the book is written by a well-known Vedic scholar and linguist now turned *sanyasi*, it deserves attention of the general reading public. Within its limited space, it tries to popularise the Vedas successfully.

Compendium of the Central Institute of English & Foreign Languages, Hyderabad. Dr. Vashishth's is a bold step in the right direction. Besides the introduction of Dr. S. K. Verma, the book also contains a preface by the Vice-Chancellor of Gurukul Kangri University, which recommends the book not only to students and teachers but also to the general public.

In the book, the author has not tried to escape even from the most difficult corner of linguistics. In the section on 'Syntax', he has dealt not only with the traditional grammar but also with the modern 'immediate constituent analysis' of the structure of the sentence. In the composition section, there is a detailed discussion on T. G. Chatterjee and his theory of 'Form & Substance'. It also incorporates a chapter on 'Language & Literature'. It will, indeed, prove to be a useful book. The publishers have produced the book very decently and with a very fine get-up.

(8)

The Vedas & Their Teachings : Swami Dharmadasa Varshani
Vidyotsa Mandal, Publisher : Vishwa Ved Parishad, 1956.

This small booklet has been written in an easy and simple English in the form of questions and answers to give general ideas about the Vedas and their teachings. It tries to answer questions about the dates of composition, the composers and the importance of the Vedas. It provides answers to 17 questions some of which relate to the practical aspects of the such as dating and meter-counting material and social sciences etc. In question no. 14 it tries to answer the principal items of Vedic philosophy and answers to question no. 2, 3 and 10 relate to the teachings of the Vedas.

Since the book is written by a well-known Vedic scholar and a highly learned expert, it deserves attention of the general reader. Within its limited space, it tries to popularise the Vedas successfully.

“The strength of this Amrita (ambrosia) do we give this man to drink. Moreover, we prepare medicine, that he may live a hundred years with health and prosperity.”

— *Atharva Veda VIII/7/22.*

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THE VEDIC PATH

New name of the Vedic Magazine—the organ of
Gurukul Kangri Vishwavidyalaya, 1906-1936

सर्वेषामेव दानानां ब्रह्मदानं विशिष्यते

If all the gifts that of divine knowledge is the highest and the noblest,

Gurukul Kangri Vishwavidyalaya
H A R D W A R (U. P.)

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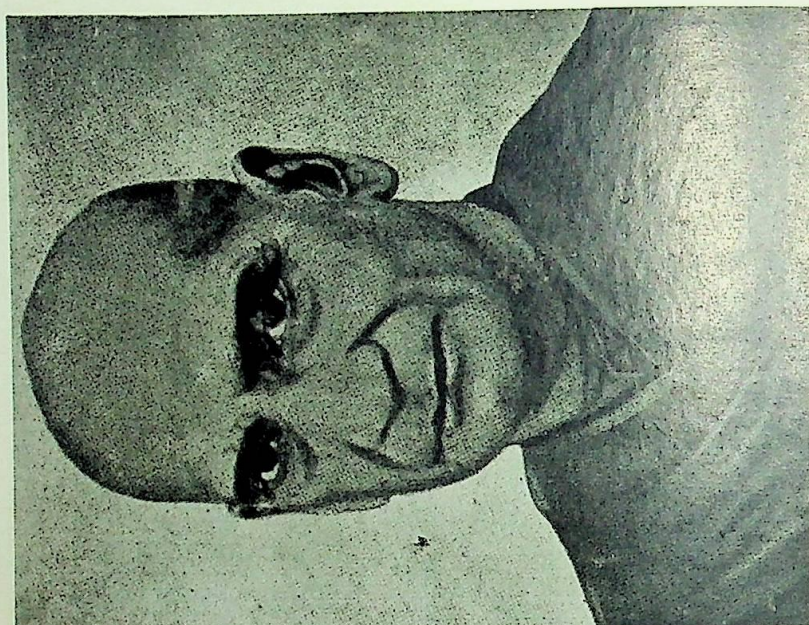
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The MAHARSHI SWAMI DAYANAND SARASWATI
Great Leader of Indian Renaissance and Reformation
Founder of Aryasamaj



Acharya RAMADEV
Great Indologist, Scholar and Educationist
Editor of the Vedic Magazine from
1906 to 1936



Swami SHRADDHANAND
The great reformer, nationalist and
freedom fighter
Founder of Gurukul Kangri Vishwavidyalaya

Message
from Shri Fakhruddin Ali Ahmed Sahib
President of India

RASHTRAPATI BHAVAN NEW DELHI-110004
INDIA

March 26, 1976.

I am glad to know that the Institute of Vedic and Indological Studies and Research, Gurukul Kangri Vishwavidyalaya, will revive its journal the 'Vedic Magazine'. I hope the journal will make a significant contribution to the field of Vedic Research and Indological Studies.

I wish the 'Vedic Magazine' all success.

F. A. Ahmed
(President of India)

**Message from
Shri B. D. Jatti, Vice-President of India**

**VICE - PRESIDENT
INDIA
NEW DELHI**

March 25, 1976.

I am glad to know that the University of Gurukul Kangri will revive the Journal "Vedic Magazine" and that its first issue will be out on the 14th April, 1976. I send my best wishes for the success of the publication.

B.D. Jatti

**Message from Dr. Karan Singh
Minister of Health, Govt. of India**

**Minister of
Health and Family Planning, India
New Delhi-110011**

My dear Shri Vidyalankar,

I am happy to know that you are reviving the Vedic Magazine. This has had a rich and interesting past, and I hope you will be able to reach the same standards in the future.

With good wishes,

**Yours sincerely,
Karan Singh**

Message from Shri K.N. Channa
Education Secretary, Govt. of India

Secretary
Ministry of Education & Social Welfare
and Department of Culture
Government of India
New Delhi
April 7, 1976.

I am glad to learn that the Gurukul Kangri Vishwavidyalaya has decided to revive the journal "Vedic Magazine" and is bringing out its first publication on the 14th April, 1976.

I send my best wishes on this occasion.

K.N. Channa

Message from Professor Satish Chandra
Chairman, University Grants Commission

University Grants Commission
Bahadur Shah Zafar Marg
New Delhi-1
6th April, 1976.

I am pleased to know that the Gurukula Kangri Vishwavidyalaya is bringing out the first issue of Journal of Vedic and Indological Studies-named "Vedic Magazine" on 14th April, 1976. I would like to send my blessings and good wishes on the occasion.

Satish Chandra
Chairman, University Grants Commission

Message
from Swami Satyaprakashanand Saraswati
Ex-President, Sarvadeshik Arya Pratinidhi Sabha
New Delhi.

The Vedic Magazine has been so well known among scholars interested in the Vedic studies in particular and oriental literature in general. For certain unavoidable reasons its publication remained suspended for the last several years. It gives me great pleasure to learn that its publication is going to be revived under the Chief Editorship of our distinguished colleague, Dr. Satya Ketu ji and I am confident that it would be able to maintain highest academic standards. Its publication would give new opportunities to the Vedic scholars devoted to learning in the Universities and other Research Institutes to publish their contributions. I send my best wishes for the success of this Journal and. I am sure its publication will be welcomed in India as well as abroad.

April 6, 1976

Satyaprakashanand Saraswati

MESSAGE FROM SHRI MUNI MEDHATITHI

I heartily welcome the happy news, that the Gurukul Kangri Vishwavidyalaya has decided to restart publication of its old well-known Vedic magazine under the auspice of the Shraddhanand Research Institute. The old Vedic Magazine was started in 1906 and continued its glorious career till 1935 under the able editorship of Professor Acharya Rama Dev. It particularly played its memorable part among the learned public especially interested in Vedic research.

The new publication, to be edited by the well-known scholar Dr. Satya Ketu Vidyalkar and devoted to the same ideals of research in Vedic and Sanskrit literature, Indian philosophy, religion and culture, ancient Indian history and allied Indological problems in general, is also expected to fully satisfy the present needs of an up-to-date research journal in the same sphere.

There is no denying the fact that the circle of scholarly public interested in Indological research, both in India and abroad has very much increased in these years. The days of any sectarian ideology have come to an end and the learned public is getting more and more interested in totally unbiased and really scholarly research in the fields like philosophy, religion and culture and especially in the catholicity of Vedic ideology.

While fully appreciating the above ideals I would like to emphasise the fact that in the opinion of those modern scholars who have devoted their whole life to the deep study of Vedic literature, the Vedic Magazine should always keep in view the highest catholic moral aspects of the Vedic ideology which if properly visualized is capable of uplifting the human race in general to the highest level of true morality and culture. With these ideals in my mind, I send my hearty good wishes for the proposed Vedic Magazine.

Muni Medhatithi

(Dr. Mangal Deo Shastri M.A.D. Litt. (Oxon.)
Vidyamartand Former, Visitor of Gurukul
Kangri Vishwavidyalaya and ex-Vice Chancellor
of Sanskrit University, Varanasi)

MESSAGE

*from Shri G. B. Kumar, Vice-Chancellor Gurukul Kangri
Vishwavidyalaya*

I am very happy to note that the Vedic Magazine is now going to be revived under the able leadership of Dr. Satyaketu Vidyalankar. The journal was started by the late Prof. Gurudutta "to meet the needs of the ever-increasing interest in the Vedas by presenting translations, abstracts, reviews and criticisms on different portions of Vedic literature, to picture the interior truths of Vedic philosophy so needed in this age of externalism, to present the philanthropic or benevolent religion of the Vedas, in contrast with the sectarian or communitarian but not humanitarian religions of the world, to attack time-honoured and ignorance-begotten superstitions, to teach the principles of true reform as distinguished from time-serving and popular policies, to keep alive the pure and simple truths of the Vedas by presenting controversial articles and reviews, to remove the wilful misinterpretations or sincere misunderstandings of selfish priestcrafts, pedantic philologists and shallow materialists;..."

The scholarly exposition of the Upanishads by the learned Pandit, his passionate denunciation of vice and folly, and his bold condemnation of hypocrisy won for him an enviable place in the history of the Arya Samaj Movement. Unfortunately his untimely demise interrupted the publication of the Magazine. In the year 1900, however, when the Gurukula came to be established, it was decided to restart the Magazine. As a result, the first issue was published in Asarha, 1964, with Prof. Rama Deva as the Editor. Among the pioneers who contributed to the pages of the Magazine were men of such profound scholarship and versatile erudition as Pandit Ganga Prasad M.A., Mr. Harbilas Sarda, B.A., M.R.A.S., F.R.S., Lala Ghasi Ram, M.A., L.L.B. of Meerut and Mr. Ram Gopal, B.A., Barrister-at-law, Bassien, (Burma).

As has been recorded elsewhere much useful work was done by this Magazine during the years of its existence.

I am very glad to find that Dr. Satyaketu Vidyalanakar has undertaken to revive this Magazine. I have no doubt that in his able hands this Magazine will carry forward the torch lit by our worthy predecessors and shall be "conducted on broad and catholic lines and in a spirit of absolute independence and fearless regard for truth", as envisaged by them.

I wish Dr. Satyaketu Vidyalanakar and his enthusiastic team all success.

Gurukula Kangri, Haridwar.

G.B. Kumar

March 29, 1976.

Nectar of the Vedas

(Yajurveda Chapter XXXX)

ओ३म् ईशावास्यमिदं सर्वं यत् किञ्च जगत्यां जगत् ।

तेन त्यक्तेन भुञ्जीथा मा गृधः कस्य स्विद्धनम् ॥

Whatever there is moving in the universe
Is enveloped by God who does darkness disperse
Enjoy the things of the world with renunciation
Don't be greedy, remember God's relation
Whose wealth is this, over this seriously ponder
It's all God's who true joy does shower.

(२) कुर्वन्नेवेह कर्माणि जिजीविषेत् शतं समाः ।

एवं त्वयि नान्यथेतोऽस्ति न कर्म लिप्यते नरे ॥

A man should try to live for hundred years
Only doing good deeds, a man himself endears,
There's no way but this to be detached from action
This is the path leading to emancipation.

(३) ओ३म् असुर्या नाम ते लोका अन्धेन तमसा वृताः ।

तांस्ते प्रेत्याभिगच्छन्ति ये के चात्महनो जनाः ॥

Men of Asuric (demonic) nature
Covered with gloom of ignorance
Who are devoid of real culture
Who kill their conscience and to *self dance*
Go to the worlds full of darkness
As they have in their nature meanness.
Even here they suffer and after they pass
They are given to grief and sorrow which their evils amass.

(४) अनेजदेकं मनसो जवीयो नैन देवा आप्नुवन्पूर्वमर्षत् ।

तद्भावतोऽन्यान्त्येति तिष्ठत्तस्मिन्नपो मातरिश्वा दधाति ॥

One unmovable but swifter than the wind
Is God whom the senses can never find
He's present everywhere, wherever we go
Though stable He surpasses others running we know

A devoted soul consecrates his actions to Him
And meditates on Him whom glorifies every hymn.

- (५) तदेजति तन्नेजति तद् दूरे तद्वन्तिके ।
तदन्तरस्य सर्वस्य तद्गु सर्वस्यास्य बाह्यतः ॥

He moves all but does not himself move
He is far and near whom none can remove.
He is within the world but also outside
He's omniscient from whom none can hide.

- (६) यस्तु सर्वाणि भूतान्यात्मन्वेवानुपश्यति ।
सर्वं भूतेषु चात्मानं ततो न विचिकित्सति ॥

He who sees all beings in God and God in all beings
He does not *have any doubt* (hate any one)
But sincerely loves all beings.

- (७) यस्मिन्सर्वाणि भूतान्यात्मैवाभूद्विजानतः ।
तत्र को मोहः कः शोक एक त्वमनुपश्यतः ॥

What delusion and what grief can overcome an enlightened
Who regards all as his selves, his sorrow has an end.
He sees one God in all and rejoices
He leaves to God all his choices.

- (८) स पर्यगाच्छुक्रमकायमव्रणमस्नाविरं
शुद्धमपापविद्धम् । कविर्मनीषी परिभूः स्वयम्भूयथा-
तथ्यतोऽर्थान्व्यदधात् शाश्वतीभ्यः समाभ्यः ॥

God is Almighty, absolutely formless
He's perfectly pure, sinless and flawless
Free from sinews and all kinds of bondage
He's omniscient controller whom beholds a sage,
Self-existent by His infinite might he creates the world
For immortal soul's guidance, he reveals his infallible word
Real and not illusory are the objects made by him
Perfect is He whom glorifies every Vedic hymn.

- (९) ओ३म् अन्धन्तमः प्रविशन्ति येऽसम्भूतिमुपासते ।
ततो भूय इव ते तमो यजसम्भूत्यास्ताः ॥

They enter into darkness, who are engrossed in the work
individual

Into greater gloom they enter
In social work alone who dwell.

- (१०) ओ३म् अन्यदेवाहुः सम्भवादन्यदाहुरसम्भवात् ।
इति शृश्रुम धीराणां ये न स्तद् विचचक्षिरे ।

Different is the fruit of collective work
From the fruit of the work individual.
This is what we've heard from the wise
Who in God and wisdom dwell.

- (११) ओ३म् सम्भूतिं च विनाशं च यस्तद्वेदोभयं सह ।
विनाशेन मृत्युं तीर्त्वा सम्भूत्य ऽमृतमश्नुते ॥

He who knows and unites both
Social and individual work
Who knows the work individual's worth
But does not social duty shirk
By individual efforts crosses death
By collective work attains abiding mirth.

- (१२) ओ३म् अन्वन्तमः प्रविशन्ति येऽविद्यामुपासते ।
ततो भूय इव ते तमो यः विद्यायां रताः ॥

They enter into darkness
Who are engrossed in actions.
In deeper gloom they enter
Who proud of knowledge, give up good actions

- (१३) ओ३म् विद्यां चाविद्यां च यस्तद् वेदोभयं सह ।
अविद्याया मृत्युं तीर्त्वा विद्यायामृतमश्नुते ॥

He who unites knowledge and action
Saves himself from distraction.
By action he overcomes destruction
By knowledge, he attains salvation.

- (१४) ओ३म् वायुरनिलममृतमथेदं भस्मान्तं शरीरम् ।
ओ३म् क्रतो स्मर किलवे स्मर कृतं स्मर ॥

Soul is active and immortal
But the body is surely mortal.
O active soul, remember Om
In whom is our aliding home
Remember him for gaining strength
So you may go to any length.

Remember the work you be done
All sinful acts you must shun.

(१५) अग्ने नय सुपथा राये अस्मान्विष्वानि देव वयुनानि विद्वान् ।
युयोध्यस्मज्जुहुराणमेनो भूयिष्ठां ते नम उक्ति विधेम ॥

By the path of righteousness
O lord lead us on
Thou knowest all our actions
Thee alone we rely upon.
With deep humility
We pray for prosperity
Drive away from us all crookedness,
We bow before thee, make us sinless,
Humbly we salute thee O lord
To Thee be attuned our hearts' chord.

(१६) हिरण्मयेन पात्रेण सत्यस्यापिहितं मुखम् ।
योऽसावादित्ये पुरुषः सोऽसावहम् ।
ओ३म् खं ब्रह्म ॥

The face of truth is covered by golden vessel
Don't fall in temptation but do good deeds well.
I thy Lord am in thy breath and in the sun
I'm omnipresent, to attain me all sin
You should shun.

Swami Drarmanand Saraswati

On behalf of the Editorial Board

It is an auspicious year for Gurukul Kangri Vishwavidyalaya when a closed gate of ancient and modern learning is opening again, an old faded tree is embellishing itself with colourful sprouts, a 'gupta Ganga' is reappearing, a saint having observed a long silence is speaking again, and the *Vedic Magazine*, a mouthpiece of the ideals for which Gurukul was established is again available to readers. It is, in fact, a continuation of the endeavour of our predecessors, founders and inspirers such as Swami Shraddhanand, Pandit Gurudutta Vidyarthi, and Principal Ramadev.

The Vedic Magazine has a chequered history, appearing first in the first decade and disappearing in the fourth decade of this century to reappear at this hour. When the British rulers of India were busy with introducing an educational system sponsored by Lord Macaulay, the main object of which was to create a class of educated Indians who could be Indians in blood and colour but English in thought, tastes, culture and way of living, Swami Shraddhanand took a bold step in 1900 to found an educational institution on the bank of Ganga near Hardwar, which was a challenge to Lord Macaulay. This institution known as *Gurukul* aimed to stop the process of denationalisation set in motion by the English system of education. The Gurukul gave equal importance to ancient and modern learning and adopted Hindi as medium of instruction. It was a residential institution with an atmosphere of Indian culture and gave much emphasis on ideals propounded in the Vedic literature. The Vedic Magazine was the organ of this Gurukul and it was through this Magazine that Swami Shraddhanand and his associate Principal Ramadev inspired and guided national consciousness and conscience by putting forth the message of our ancient sages and the true teachings of our scriptures. Having been inspired by its spirit of independence and fearlessness, *The Indian Spectator* observed:

We commend this magazine which is to be conducted on broad and catholic lines and in a spirit of absolute independence and fearless regard for truth, to the notice at all who are

interested in the Vedic law and literature and in the regeneration of the country.

People like Leo Tolstoy were highly impressed by this magazine (see Tolstoy's letters appended to this note). And *The Hindustan Review* said about it: "As a rule its articles afford interesting reading and its contributors are men who may claim to be heard,"

The glimpses of the old volumes of the *Vedic Magazine* will bring to our focus great national luminaries and freedom fighters like Lala Lajpat Rai who contributed an article, 'The Arya Samaj and the Present Crisis' to one of its volumes. Such valued contributions must never have escaped the eyes of the rulers and the general reading public. Though begun as a cultural movement to project ancient Indian culture and civilization and improve the image of India abroad and to regenerate moral and spiritual values, the Magazine soon established itself as a scholarly journal, accepting the wider connotation of the term 'Vedic' to incorporate articles touching upon topics related to religion, metaphysics, ethics, logic, philosophy, literature, linguistics, natural and social sciences and so on.

In the early stages of its life, the Magazine produced generally the articles of a popular nature. But later on it began to incorporate learned articles of research value. No doubt the Indological subjects remained its favourites, and it did publish topics such as 'Ancient Aryan Civilization and Culture,' 'The Age of Panini,' 'The Position of Women in Ancient India,' 'The Art of Writing in Ancient India,' 'Fire-arms in Ancient India,' 'Ecclesiastical Poetry of Old Asia,' 'Some Aspects of Social, and Economic, Political Life in Ancient India,' 'The Age of the Ramayana,' 'The First Domestic Animal in the Light of Aryan Antiquity,' 'The Epic Kingship,' 'Police System in Ancient India,' 'Ancient South Indian Polity,' 'Irrigation in Medieval India,' 'Republics in India in the 6th Century B.C., etc. But at the same time it also brought out topics related to other subjects such as 'Education as a World Problem,' 'National Education,' 'Metaphysical Basis of Educational Theory,' 'Sexual Hygiene,' 'Radium and Radio-Activity,' 'Mechanics and Quantum Theory,' 'Economics of Indian Agriculture and Industry,' 'Industrialis in India,' 'New Tendencies in Indian Economics,' 'Indian Economics,' etc.

The *Vedic Magazine* also rendered a great service in cherish-

ing religious harmony and national integration. It published articles such as 'Islam as a World Religion,' 'Lives and Times Sikh Gurus,' 'The Baha'i Religion,' 'Vedic Dharma and Christianity,' 'Vedic Studies and Buddhism,' 'Vedic Influences on Zoroastrianism,' 'The Ancient Chinese Religion and the Vedic Religion,' 'Shaivism in Pacific Lands,' 'Aryanised Christianity,' 'Unity of All Religions,' 'Bradley and Shankar,' etc.

Prof. Laxman Swrop, Prof. Sovani, M. St. George Lane Fox Pitt, Her Excellency Princess Marcy Karadja, Lord Kitchner, Principal Vasvani, Prof. Balkrishna, Pt. Gangaprasad M.A. Shri Jaidev Vidyalkar, Prof. Satyavrat Siddhantalankar, and James H. Consins to mention only a few were among the renowned contributors who nourished this journal with their esteemed labour.

Now under the inspired and learned patronage of our new Vice-chancellor Shri Balabhadra Kumar as well as the able and scintillating guidance of our former Vice-chancellor Dr. Satyaketu Vidyalkar the *Vedic Magazine* is reappearing with a hope that in a period of spiritual and moral crisis it will put forward the wholesome view of the full man whose material and spiritual legs should have harmony and balance.

LETTERS OF LEO TOLSTOY TO THE FORMER EDITOR

Fasuka, Youlsk Gonb

21st Nov. 1909

Dear Sir,

I thank you very much for the magazine which you were so kind to send me. I am reading it always with great interest. In the last No: received by me Vol. III, No. 4, I appreciated very much the article 'Plato and Shankaracharya' by Pandit P.D. Shastri M.A., B.T. You would be very kind if you consented to help me with a work that I have lately begun and which I hope can be of some interest to you. I have begun a series of expositions of all the great religions of the world, the essence of which is always one and same for all. Naturally the Vedic Religion as one of the most ancient and profound must take in these series the first place. I wish to make a selection of the most striking and profound sentences of the Vedic Religion.....with full esteem,

Your friend,
Leo Tolstoy.

ON BEHALF OF THE EDITORIAL BOARD

19

II

I thank you for the sending of the Vedic Magazine. It was agreeable to me to read the exposition of the teaching of the Vedas (an exposition of '*Shivasankalpamastu*' by Dr. Sangat Ram) and also the article about Arya Samaj by Pandit Balkrishna Sahai.

Yours
Leo Tolstoy

Shraddhanand Shodh Sansthan

(Institute for Vedic and Indological Studies and Research)

One of the main objects of the Gurukul Kangri Vishwavidyalaya is to re-establish and elucidate and interpret the contents of the Vedas and allied literature, Indian philosophy, culture and history of India vis-a-vis the ancient world. It has been, therefore decided to make the Vishwavidyalaya a centre of such study and research. Shaddhanand Shodh Sansthan is being established for this very purpose and the Sansthan proposes to undertake the following projects :

(i) Vedic Vishaya Kosha (Lexicon of Vedic subjects)

The Vedic Samhitas present a remarkable hypocrène for philosophy, religion, social and political organisations, commercial institutions, medical themes and of numerous other subjects. There is hardly a work ever done to present a magnum opus incorporating a study of these topics. Macdonell and Keith got published two outstanding works entitled the Vedic Index and Vedic Mythology, of which the former is far from being perfect even in the treatment of terms which it essays to do and the latter has become absolutely out-of-date in the present context of Indological research and in view of the recent finds in the Middle East. An endless mass of material has come to light as a result of the excavations in the western world. If the data thus recovered is ignored, the bottom of any purposeful endeavour for Indological studies is bound to be knocked out. What is needed is preparation of a comprehensive lexicon of Vedic terms, topics and subjects, which under the present project are expected to cover two volumes-the first studying the data from the four Vedic Samhitas and the second marshalling into array those collected from the post-Vedic literature of Brahmanas, the Aranyakas, the Upanishadas, the Sutras and the six Vedangas.

(ii) Vedic Shabdārtha Kosha (Lexicon of specific Terms in Vedic Literature)

Quite a number of scholars both Indian and foreign have

attempted to lay bare the meaning of specific terms occurring in the Vedas. Indian scholars like Madhava, Skandaswami, Sayana, Ubbata, Mahidhara, Dayanand Saraswati and Kapali Shastri and foreign scholars like Max Mullar, Weber, Griffith, Whitney, Oldenberg and Keith have sought to interpret the Vedic terms in their own way and have naturally often differed in their interpretations. The ancient texts like the Brahmanas, Nirukta and the Sutras also have attempted to explain and elucidate the import of countless obscure Vedic expressions, but they too are not unanimous in their conclusions. A lexicon incorporating all the senses, meanings and interpretations of the Vedic vocabulary of terms as guessed and deduced by scholars, both Indian and foreign, ancient and modern, together with citations of cross-references and contexts will indeed render infinite assistance to Vedic scholars. It is essential for both the nee-initiates and the experts not only to be conversant with the work done already along the line, but also to have advantage to turn to such encyclopaedic compilation for ready reference. Such a comprehensive lexicon is, therefore, an imperative need and such one is being posed to be compiled at this Sansthan is of the Vishvavidyalayas. It will, without doubt, substantially contribute to the Vedic studies and will constitute both its basic core and starting point.

(iii) Data for the Study of Vedic and Ancient Indian Contacts with other civilisations of the Ancient World.

A large number of volumes on the ancient civilisations of western Asia and north Africa were published in course of the nineteenth century embodying the results of excavations in the Middle East, Crete, Mycenae and Troy by Botta, Layard, Petrie, Schliemann, Evans and others to which the turn of the century has added enormously. The decipherment of the Egyptian hieroglyphics by Champolion and Taylor, the Sumerian and Akkadian cunifoms by Rawlinson the syllabic and formal records of Hittites, the agnates and collaterals of the Vedic Aryans by Gelb and Gadd, and the monumental writings of the Aztecs and Peruvians in central America by others have thrown a flood of light on ancient civilizations of Sumerians, Babylonians, Elamites, Kassites, Phoenicians, Cappadocians, Assyrians, Chaldeans and Scythians. All the data about these civilisations of western Asia and northern Africa have to be taken cognisance of by workers in

the field of Vedic and post-Vedic research as there are references, varied and vague, to these peoples and their cultures in ancient Indian literature.

The following project will form the spine of such work :

1. Geographical extent of the area of contact of ancient India with other lands, for example, south Russia, America, Turkey and Asia Minor, the Hittite territory, Boghaz-koi, Mesopotamia, Elam, Egypt and north-western Iran.

2. The ancient peoples with whom India had contacts, namely, the Hittites, Mitannis, Phoenicians, Assyrians, Scythians etc.

3. Mythological affinities of ancient India with other peoples : the myth of Diti and Aditi and the feuds between serpent and the Eagle; the story of Sampati of India and Prometheus and Icarus of Greece; that of Vrishas as Indra comparable with the Apis Bull of Egypt, the winged Bulls of the Assyrian Nineveh and the bearded Bulls of the Iranians forming the capitals of the Persepolitan columns.

4. The story of the Great Flood (Jalaplavana or the Deluge) related in Shatapatha Brahmana, the Avesta, the Old Testament and the Sumero-Babylonian traditions has now been substantiated by the extensive excavations of Sumeria and the Jamdet-Négar area by Leonard Woolley.

5. Study of the intercourse between ancient India and the western world.

(iv) Comparative Study of Religions

Vedas are believed to be the fountain head of all sects and aspects of Hinduism. Jainism and Buddhism too have derived much from Vedic sources as far as their philosophical doctrine, moral concepts and religious practices are concerned. India had close contacts with the western world in ancient times and the religious creeds of the old civilisations are said to have been considerably influenced by the Vedic and post-Vedic beliefs of India. Their impact on numerous ancient sects of the western world has already been acknowledged by western scholars working in their respective fields. A comparative study of religions in a certain thoroughness is bound to reveal the elements common in them all as also the extent to which they have influenced one another. It

need hardly be added that such study will prove especially useful in the present context of our country and will contribute a considerable deal to national integration.

(v) **Development of Indian Philosophical Concepts and their Synthetical approach**

Gurukul Kangri Vishwavidyalaya has its own important place in the field of Oriental studies. Swami Dayanand has contributed much to the development and understanding of Indian philosophy. He presaged a comparative study of all Indian philosophical schools and their synthetical assimilation. The view had already been enunciated by Indian savants centuries ago and the result had been the appearance of the great and imitable work called SARVA-DARSHAN-SAMGRHA; which brings to light for the first time the existence of such heterogeneous philosophical schools as of Lokayatas. The tradition of such compilations was, however, unfortunately abandoned long ago. It may be the pride of the Gurukul Kangri Vishwavidyalaya to revive such study and carry the thread along. This programme sponsored by the Gurukul is likely to prove the cornerstone of the structure seeking to promote the cause of Indian philosophy vis-a-vis to philosophies of the world as a whole.

(1) **Metaphysical Problem :**

Sources of Indian Philosophy : Vedas, Upanishadas and Sutras. Nature of Reality : Concepts of Brahma, Siva, Iswara, Purush and Prakriti, Vignana, Soonya, etc. Their development, contrast, comparison and a synthetical approach. The self, the matter, problems of monism and pluralism.

(2) **Cosmological Myths and their reflections in other Civilizations :**

Development of cosmological theories in the Vedas, Upanishadas. Cosmic evolution, the different interpretations of creation (idealistic and realistic), theories of causation—contrast, comparison and their synthetical solution.

(3) **Epistemological Problems :**

Development of Indian Logic : Buddhist and Nyayic, logic in other schools. Problems of knowledge and reality, sources of knowledge, Pramanas, nature of pramanas, validity of knowledge, different views and their synthetical solution.

(4) Ethical Problems :

Concepts of salvation : Nirvana, Mukti, etc. Means of salvation. Contrast, comparison and their synthetical solution. Theory of Karma. Moral problems and their solution. Concept of Dharma. Practical life, and all that pertains to the personal achara of individual and the community.

(5) History of Aryasamaj

The contribution of Aryasamaj towards Indian renaissance and reformation has not been properly studied so far. In fact, Swami Dayanand Saraswati was the great leader of these movements that lead to the awakening of our country and ultimately to independence, Aryasamaj continued the work begun by Dayanand and worked not only among the intelligentsia but also among the illiterate masses. It is proposed that a cell be organised at the Gurukul, where all material concerning the growth and spread and Aryasamaj will be collected and preserved and will be processed into a comprehensive history of the movement.

(5) Publication of the Vedic Path.

It has been decided to revive the Vedic Magazine—organ of the Gurukul Kangri Vishwavidyalaya that discontinued publication in 1936 due to financial difficulties. The Magazine had gained fame and popularity in India and abroad for its original contributions in the field of Vedic studies and Indological research, and great scholars like Leo Tolstoy were among its regular readers. This organ of Gurukul is now being revived under new name of the Vedic Path.

Contribution of Vedic Thought to World Peace

(By Prof. Satyavrata Siddhantalankar, Ex-M.P. and Vice.
Chancellor, Gurukula Kangri University.)

1. THE PROBLEM.

Since the dawn of creation the world is torn between two conflicting emotions and thoughts—love and hate. A person loves those, who he thinks, will help him in the realization of his interests, and hates those, who are likely to oppose him in the fulfilment of his ambitions. Thus two orders are created with regard to an individual, family, group, society, nation and the country. An individual forms friendship with persons who share common interests with him. He loves them. He might also come across persons, who act as obstacles in the path of the fulfilment of his ambitions. He hates them. The same principle applies to families, groups, societies, nations and countries. On the one side, are arrayed those who are with us and, on the other side, are arrayed those who are against us. Our reactions are: those who are not with us are against us. We are at peace with those who are with us and are at war with those who are against us. The more we extend our area of common interests with others the more we are at peace. The more we maintain our separate existence, the larger is the possibility of conflict of interest with others—resulting in want of peace.

There is no denying the fact that man—whether as an individual, as a part of a family, a group, a society, a nation or a country—in the long run wants peace and harmony. The ultimate object is to bring heaven on earth by the materialisation of the long-cherished dream of One World where there may be no conflict, no war, and where peace should reign supreme. But the problem is: has he been successful in ushering in the era of millennium by unification of all the conflicting forces of the world. If not, why not ?

With a retrospective look on history we observe that there have been several attempts aiming at the unification of the world at various levels. These attempts can be classified as :

- (a) At Physical level, which means the use of military force,

- (b) At Socio-economic level, which means the removal of social and economic inequalities by taking possession of the power of the State,
- (c) At Semi-spiritual level, which means the use of religion supported by military might, and
- (d) At Spiritual level, which means the realization by the individual of the Principles of Brotherhood of Man and common interests of Mankind.

Let us see how these attempts have fared.

2. IDEA OF ONE WORLD AT MILITARY LEVEL.

The pre-condition of peace is unity, and to that end mighty men of the world have harnessed their military power to crush by violence all that stood in their way. Alexander the Great trod underfoot country after country and tried to subjugate every kingdom. This was an experiment in creating the concept of One World by eliminating the existence of alternate power, where unity should prevail and no room left for dissensions and conflicts, which disturb peace of the world. Alexander failed and the World could not become One. Napoleon embarked upon similar course. His genius was unequalled. He tried to level down the barriers that separate one country from another and one nation from another nation. This experience also rested on hatred and violence. Though often victorious ultimately he found himself escoused in St. Helena and the world remained as it was—not One, but a conglomeration of many conflicting interests, running through different countries and nations.

In recent history we had two World Wars—the declared object of both of which was to end the threat of war forever. The first World War started in 1914 and ended in 1918, leaving a bitter legacy which convinced the nations of the world that hatred, violence and war could never be instrumental in cementing the conflicting claims and interests of nations. Having realised that permanent peace on earth can never be established by resorting to violence, the World-leaders set themselves to the task of evolving the principles upon which peace foundations of the world could be safely laid. This resulted in the treaty of Versailles of 1919, establishing The League of Nations with the avowed object of International Peace. This organisation, set up after the First World War to promote international co-operation and to achieve international peace and

security, failed to enforce its decisions and was consequently unable to prevent the Second World War of 1939—1945. The intervening period between the two World Wars from 1920 to 1938 was utilised by Nations for preparing for another devastating world-war which was fought between the Axis and Allied Powers during 1939—1945. During the course of the Second World War the leading International personalities realized that the League of Nations had not served its intended purpose and that a Second look at the whole problem was necessary. After the end of the second World War a new international organisation was set up—The United Nations' Organisation. This Organisation was founded in San Francisco (USA) in 1945 under a permanent charter ratified by 50 countries who were opposed to the Fascist coalition of Germany, Japan and Italy and their satellites. Now its membership has gone up to 132. After the formation of the U.N.O. the League of Nations was dissolved in 1946.

Though the formation of the United Nations' Organisation was a right step in the right direction, yet the question still holds good: Has the era of peace dawned upon the World? Has war disappeared? So far as India is concerned, Pakistan has attacked India three times. Once in 1947, Pakistan usurped a part of Kashmir which question is still hanging fire in U.N.O. Again in 1965, Pakistan declared war against India without provocation. And yet again on 3rd December, 1971, Pakistan declared a total war against our country. Earlier, China had committed aggression against India in 1962. Besides, there have been frequent wars between Egypt and Israel, North and South Korea and Vietnam, Cambodia and Laos etc. What has the United Nations' Organisation done to prevent these wars except indulging in debates in the Security Council where the decision one way or the other could be vetoed by either of the five Great Powers. The concept of veto itself means that the interests and ambitions of the vetoing power are to be safeguarded. Where interests and ambition step in—be it in the matter of individual, family, group, society, country or nation—peace remains a remote dream.

In spite of the United Nations' Organisation piles upon piles of Atomic bombs are accumulating. Countries are vying with one another in increasing their devastating potential and a major part of their revenue is spent upon stockpiling the lethal weapons. They talk of peace but prepare for war. The intervening period between

one war and the other is a period of platitudes for peace but, in fact, it is a period for equipping oneself for a war which, they have always claimed, will end war but has never succeeded in ending war.

Very recently on 19th October, 1975, when Dr. Kissinger, U.S. Secretary of State, visited China to prepare ground for the visit of Mr. Ford, the President of United States, Mr. Chiao Kuan hua, Foreign Minister of China remarked : "The only way to deal with hegemonism is to wage a tit-for-tat struggle against it. To base oneself on illusions, to make hope or wishes for reality and act accordingly will only abet the ambitions of expansionism and lead to grave consequences. The stark reality is not that detente has developed to a new stage, but the danger of a new world war is mounting."

The same day Mr. Kewal Singh, India's Foreign Secretary, urged at a United Nations' forum that the current hot-beds of conflict and situations of strife should be ended in full implementation of the U. N. declaration of strengthening international security.

We are still moving in the dreaded atmosphere of fear of tit-for-tats and new wars as well as in the atmosphere of 'shoulds' after 30 years of the founding of United Nations' Organisation.

3. IDEA OF ONE WORLD AT SOCIO-ECONOMIC LEVEL.

Another attempt at World unification to bring about lasting peace has been made at social and economic level by socialist and communist philosophers headed by Karl Marx. According to them, the peace of the world is disturbed due to social and economic inequalities. As the rich grow richer social status also changes resulting in economic and social stratification. Some stand higher and some stand lower in the scale of social structure which gives rise to social conflict and disturbance of world peace. As people with vested interests cannot be willing to part with power, so by resorting to class war the conflicting element of social and economic inequality is eliminated and an equilibrium is established. This experiment has been tried mainly in Russia and China, following into the footsteps of those who taught that war was a biological necessity. Just as Alexander and Napoleon resorted to war against the countries of the world and relied on military force and violence to establish an Empire of their own, which was their conception of World peace, similarly leaders of Russian and Chinese revolution

relied on violent methods and established a government in their respective countries of their choice. Having done so, these two Protagonists of world peace, though ideologically repeating the same Mantrams, stand face to face to fly at each other's throats at a moment's notice. Is it not strange that these two nations, professing the same ideology, abuse each other as reactionaries and revisionists and are regarded as bitterest enemies. The reason is not far to seek. As they have achieved their objectives through violence, they cannot get rid of that madness. Realizing that the only weapon left in the armoury of the Western nations for the achievement of the idea of One World is military force, Bertrand Russel in a pessimistic, subjective mood thus wrote in 'Atlantic Monthly' in March issue of 1951 :

"The world is in a state of international anarchy for which the only solution is a world—government or a world empire. The British Commonwealth and the United States must be convinced of the military unification of the world. They should then offer to all other nations the option of entering into a firm alliance in which resources will be pooled and defence against aggression assured. After a reasonable measure of consolidation has been achieved, recalcitrant nations should be declared public enemies. If they yield, the threat of force succeeds ; if they do not, war decides the issue."

Mr. Russel favoured the United States, but was of opinion that even a world empire of USSR would be preferable to the present international anarchy. Arnold Toynbee, who recently died, was also a strong advocate of world government.

So, this is where we have come to. First it was Alexander the Great ; then Napoleon ; then the League of Nations ; then the United Nations' Organisation ; then Marxism-Leninism ; then Bertrand Russel's advice of despair—but all this through military dictatorship—the objective being One World, one Government, one Empire for the achievement of peace in the world.

4. IDEA OF ONE WORLD AT SEMI-SPIRITUAL LEVEL.

The third attempt at the One World concept was made by Christianity and Islam by spreading their religions throughout the length and breadth of the world. Christ preached Universal Brotherhood of man and his followers took his message to every nook and corner of the world and were to some extent successful in removing

the barriers between man and man. But as Christianity spread and the Church became an Institution and its authority was vested in the Pope, worldly interests were created with the result that the atmosphere of peace generated by the teachings of Christ became vitiated. Luther revolted against the vested interest of the Pope and established a protestant organisation. The unity established by the Church in various countries fell to pieces as everywhere the Church was split into Roman Catholics and Protestants. At this time the Pope took to violence and no stone was left unturned to suppress the heretics—Protestants. The chasm between the Catholics and Protestants assumed the form of regular torture of Protestants by Catholics. Latimer—a Protestant bishop was put to death by the order of the Church and was burnt alive. Ecclesiastical Inquisition was instituted to suppress the non-believers in the dispensations of the Holy Church and the heretics were guillotined. Both the eras—Reformation and Renaissance—which brought in freedom of thought and intellectual light in Europe, were met with violent resistance by the Church. Not only the so-called Christian heretics were killed but even men of science, who since then have changed the shape of the globe, were done to death. Bruno, who propounded heliocentric theory, was arrested at Venice by the order of the Inquisition, imprisoned for two years and then burnt alive at the stake in Rome. Galileo proclaimed that instead of the sun moving round the earth, the earth moved round the sun. He was put in prison and was released when he retracted from this theory as it militated against the conception of Christianity.

Islam also started its career of bringing oneness to the world by coercion. It went on spreading its message at the point of the sword. Jihad was its driving force.

Both Christianity and Islam, though spiritual forces in their inception, became semi-military by the passage of time, hence their call to the oneness of the world was semi-spiritual as it was based not so much on voluntary acceptance of the principles of these religions but on their potentiality for violence and the threat of loss of life. Oneness, which is resultant of fear, cannot be lasting factor for cementing mankind as is evident from Christian and Islamic countries fighting against one another. Peace brought in by coercion cannot be a peace of heart. As Christianity and Islam have used military power through crusades and jihads, hence we have styled their efforts as semi-spiritual. Any way, these forces

have ceased to be potent factors in the present set up for ushering in an era of One World.

5. IDEA OF WORLD PEACE AT SPIRITUAL LEVEL.

The only country which has used unmitigated spiritual power in the cause of developing the concept of One World without using even a modicum of force is India. More than two thousand years ago, Ashok, the Indian Emperor, launched a scheme of world unification and sent his emissaries of peace, to every nook and corner of the globe, with a message: "Man has remained till now an enemy of man and has divided mankind into separate castes, creeds and nations. He has derived nothing from it other than jealousy, hatred, bickering and distrust which have culminated in struggles and wars. The time is now ripe when we may forget the caste, creed and nation or country. Let us remember that our country is the whole world and our nation includes all mankind."

It was in 3rd century B.C. that Ashok delivered the message not of the sword but of the milk of human kindness, not of the ego but of the spirit. At the time of Ashok a Great Assembly—Mahasabha—was held, presided over by Mauggaliputta Tishya when learned men were sent to four corners of the earth to carry the message of Universal Brotherhood. He sent his son Mahendra and his daughter Sanghamitra to Ceylon. After that waves after waves of missionaries saturated with the teaching of Ahimsa and non-violence preached by Buddha left the shores of India in every direction of the world with the result that Assam, Burma, Bali, Cambodia, Java, Sumatra, China, Japan, Tibet, Eastern Asia, Western Asia, Eastern Turkistan—all were knit with the silver chord of brotherhood, and the concept of One World, so far as it could be possible in those days of great distances and want of means of communication was almost achieved. The spirit behind this achievement is well illustrated by an anecdote which has come down by tradition. Hiuen Tsang, a famous Chinese pilgrim came to India at the time of Harsh in A.D. 630. He stayed here for 12 years and collected a lot of precious Buddhist manuscripts to carry them to his country. While returning to China through the Bay of Bengal he had two young Buddhist monks with him—Gyangupta and Tyagaraj—in the vessel carrying him. While the vessel was in mid-ocean a storm raged and the captain of the vessel ordered that to save life pilgrims should unload as much material burden as possible.

Hiuen Tsang was about to throw overboard the huge precious load of books when these two young monks intervened. They remonstrated with the pilgrim saying that these books may be the source of dispelling darkness in many hearts of generations to come and so rather than the books be lost they would prefer to lighten the burden of the vessel by jumping into the ocean. Hiuen Tsang was about to protest when, lo and behold, the two young monks were lost into the surging waves of the ocean. At this sacrifice Hiuen Tsang was lost in thought and silently bowed his head to the land from which he was carrying the message of peace and brotherhood to his motherland.

It is unfortunate that at the time of Harsh, Buddhism had split into Hinayan and Mahayan and dissensions arose in Buddhism itself. Besides, Buddhism and Hinduism came into clash, so much so, that an assassin was hired by some Brahmans to kill Harsh for his love towards Buddhism. Harsh escaped the assault but ultimately he was murdered by his own minister—Arjun. However, Buddha's message of love, non-violence and Ahimsa had gone far into different corners of the earth and an unofficial united, non-aggressive atmosphere prevailed in far-eastern regions of the globe as well as on western borders of India.

Buddha's message was the message of the saints and sages of India, the message of Rishis of yore, the message of Patanjali of Yoga philosophy, the message of the Vedas. The Vedas declare :

शृण्वन्तु सर्वे अमृतस्य पुत्राः । यजुर्वेद । ११-५ ।

"Hark ye, all men, children of the Immortal Divine ! Descendants of common heritage, that ye are all one.

The Rig Veda says :

संगच्छध्वं संवदध्वं सं वो मनांसि जानताम्
देवा भागं यथा पूर्वे संजानाना उपासते ।

ऋग्वेद । १०।१६।२

Your thought should be in harmony with each other, your speech should be in harmony with each other, your action should be in harmony with each other. This is how your elders realizing their responsibility played their part in society. And again :

समानी प्रवा सहवोऽन्नभागः समाने योक्त्रे सह वो युनज्मि
सम्यञ्चोऽग्निं सपर्यतारा नाभिमिवाभितः ।

अथर्ववेद । ३।३०।६ ।

You should drink together, eat together, live together as if joined in a common yoke. Just as the pokes rotate fixed in a common axle similarly you should feel yourselves fixed in social organisation worshipping God who manifests himself in the form of sacrificial fire...Agni.

And again :

यस्तु सर्वाणि भूतानि आत्मन्येवानुपश्यति
सर्वभूतेषु चात्मानं ततो न विचिकित्सति ।

यजुर्वेद १४०-६।

One who sees all creatures as if they were his own selves and himself in others...his mind rests in peace with no doubts to disturb it. And again :

अयुतोऽहम् अयुतो म आत्मा अयुतं मे चक्षुः अयुतं मे श्रोत्रम्
अयुतो मे प्राणः अयुतो मे व्यानः अयुतोऽहम् सर्वः ।

अथर्ववेद ११६।५१।१

I am not one but am millions ; myself I see in millions of beings. These millions upon millions of eyes, ears, lives are but my eyes, my cars, my lives. I see myself at one with the countless lives of the earth...they are me and I am they.

And again :

विश्वा आशा मम मित्रम् भवन्तु । अथर्ववेद ११६।१५।६

In whatever direction I turn my eyes I look upon everyone as my friend.

The preamble to the constitution of UNESCO begins with the following words :

"Since wars begin in the minds of men, it is in the minds of men that defences of peace must be constructed."

How true. The constitution-makers of UNESCO did correctly diagnose the malady. It is very true that war and peace originate in the mind of man. But did they correctly apply the remedy? Representatives of far-flung countries sit together in Assembly halls of United Nations but though physically seated next to one another they are as distant in mind as the geographical boundaries of their countries. How could you expect of peace in such a situation.

In daily Agnihotra a devotee of Vedic culture recites at least 25 mantrams from the Vedas the burden of the song being Shanti, Shanti, Shanti-Peace, Peace, Peace-one of the Mantras being :

ओ३म् द्यौः शान्तिः अन्तरिक्षम् शान्तिः पृथिवी शान्तिः आपः शान्तिः
ओषधयः शान्तिः वनस्पतयः शान्तिः विश्वेदेवाः शान्तिः ब्रह्म शान्तिः सर्वम् शान्तिः

शान्तिरेवशान्तिः सा मा शान्तिरेवि । ओ३म् शान्तिः शान्तिः शान्तिः ।

Let there be peace in the heavens, peace in the outer space, peace on earth, peace in oceans. peace in forests where shrubs, herbs and trees grow. Let there be peace in the organs and minds of every living creature. Let there be peace eternal, in and out, here, there and everywhere. Let there be peace and nothing but peace in every nook and corner of the world. Let that peace enter into me—Peace, Peace and Peace.

After hearing this, need I tell you what is the contribution of Vedic thought towards world peace.

It is in the heart, it is in the mind that the seed of peace can be grown and cultivated. It is there that it sprouts, grows and bears fruits. The Upanishadic Rishis of yore proclaimed to the world from house-tops :

मृत्योः स मृत्युमाप्नोति य इह नानेव पश्यति ।

One who sees maniness in the world moves from death to death. The Vedas declare :

यस्मिन् सर्वाणि भूतानि आत्मन्यैवाभूत् विजानतः

तत्र को मोहः कः शोकः एकत्वमनुपश्यतः । यजुर्वेद १४०।७।

The message of this Vedic Mantra is: What personal and individual attachment there can remain in one to whom ALL become ONE and ONE becomes ALL. Personal attachment, selfish interest and ambition only cause sorrow and suffering. When ONE is for ALL, and ALL is for ONE, there can be nothing but peace. In spite of the reverberating and exasperating calls for peace in the Assembly Halls of U.N.O. there can be no peace, since wars have their origin in the minds of men and not in battlefields. It were only the Vedic Rishis who carried the fight for peace in the minds of men when they repeated again and again—‘तन्मेमनः शिवसंकपत्मस्तु’—Let my mind be full of purity of thought—and as they were the first of mankind who discovered this truth—the truth that the seed of war and peace lies embedded in the mind—let us pay homage to them at this hour of crisis for peace, and chant with the Vedic Rishis : OM SHANTIH, SHANTIH, SHANTIH.

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Some Aspects of the Vedic Culture

(By Shri Swami Dharmanand Saraswati, Vidyamartand)

I commence this article with a Yajurvedic varse (7.14) where the word Sanskriti has been clearly used for culture. I reproduce this Vedic Mantra as rendered into English by me.

The Vedic Mantra with its metrical English translation is as follows :

ओ३म् अ॒च्छिन्न॑स्य ते दे॒व सोम॑ सुवीर्य॑स्व रा॒यस्पोष॑स्य द॒दितारः॑ स्याम ।
सा प्रथ॑मा सं॒स्कृतिर्वि॑श्ववारा स प्रथ॑मो मि॒त्रो वरु॑णौ अ॒ग्निः ॥
(यजु० ७-१४)

O Source of peace, let us be
Given of Thy wealth constantly
The wealth of wisdom unbroken and vigorous
Let us be its distributors, give strength to us.
This is the first and the best culture.
It's universal meant for present and future.
God is Adorable and the First Cause,
He's the Best Friend, maker of eternal laws.

In this mantra, God has been addressed as Soma which means Source of peace and God of all wealth. We have been asked to be liberal in distributing that wealth (both material and spiritual) among the needy and deserving.

The Vedic Culture is not only प्रथमा (Prathamaa)—the first and the best, but also विश्ववारा (Vishva vaaraa)—desired by all and universal; God is the first cause, the most acceptable, the best Friend and Supreme Leader.

The following are some of the main features of the Vedic Culture :

1. We must have full faith in ONE Omnipresent, Omniscient and Omnipotent lord, who is the creator, Sustainer and Dissolver of the world. He sees all our actions and knows all our thoughts. This perfect faith in God makes us sinless and pure and removes all our fears and anxiety.

According to the Vedas, God is ONE but He is called by various names to denote His different attributes.

एकं सद् विप्रा बहुधा वदन्त्यग्निं यमं मातरिश्वानमाहुः ॥

(Rig. 1,164,46)

It is this Omnipresent and Omniscient God alone who should be adored by all and none else.

2. Immortality of Soul

The second important feature of the Vedic culture is belief in the immortality of soul. The Vedas tell us that the soul is immortal. It does not die with the body. Fire can not burn it. No sword or other weapon can cut it into pieces. No water or wind can affect it in any way. It enters into different bodies according to its good or bad actions. This belief in the immortality of soul makes a man fearless and enables him to face death bravely and calmly.

3. Belief in the law of Karma :

The third main feature of Vedic culture is unshakable faith in the law of Karma. In simple words, the law of Karma means 'as you sow, so shall you reap'.

God is dispenser of justice, who gives the fruit of the good or bad actions performed by a man. Birth and re-birth theory is certainly linked to the law of Karma. As one birth is not enough to have knowledge of all kinds and acquire perfection, one has to take several births before the soul attains emancipation. Law of karma, if sincerely believed, can make a man absolutely sinless.

5. Universal Love and Friendship :

The fourth main feature of the Vedic culture is universal love and friendship. The Vedas enjoin upon us to look upon all beings on earth as our friends.

मित्रस्याहं चक्षुषा सर्वाणि भूतानि समीक्षे मित्रस्य चक्षुषा समीक्षामहै ॥

(Y. 36.18)

i.e. All men are brothers. No one is superior or inferior by birth. God is the common Father of all and the earth is the mother of all. On this teaching which leads to world peace the Vedas lay great stress. Needless to point out that the customs like hereditary caste-system and untouchability, the idea of superiority based upon race or country are opposed to this Universal-love and friendship. Says the last hymn of the Rigveda,

समानीव आकूतिः समाना हृदयानि वः । समानमस्तु वी मनो यथा वः सुसहासति ।
(ऋग्० 10-19 1-4)

i.e. : Common be your aim and your hearts united; your minds be so that all may happily live together and co-operate with one another.

5. Benevolence and self-sacrifice

The fifth main feature of the Vedic culture is the spirit of service and sacrifice denoted by the word 'Yajna'. The Vedas lay the greatest stress on performing yajns (non-violent sacrifices) and cultivating the spirit of service and self-sacrifice.

Connected with this is the idea of benevolence. Rigveda says :

केवलाघो भवति केवलादी । (ऋग्० 1-117-6)

i.e. Man who eats alone eats only sin.

The same idea is corroborated in the Manusmriti by Manu who says :

अधं स केवलं भुङ्क्ते, यः पचत्यात्मकारणात् ।

He who cooks only for himself is a sinner.

The Bhagavad Gita supports the same idea in memorable words like

भुञ्जते ते त्वधं पापा ये पचन्त्यात्मकारणात् ।

i.e. Those sinful persons who cook for the sake of nourishing their own bodies alone, eat only sin.

Making a distinction between what is meritorious and what is not following the Veda the Mahabharat says :

परोपकारः पुण्याय, पापाय परपीडनकम् ।

i.e. Benevolence is meritorious and to give trouble to others is sinful.

6. The sixth main feature of the Vedic culture is the synthesis between spiritual and material progress and between knowledge, action and devotion. It is very wrong to believe that because the Vedic culture lay great stress on divinity it neglects material progress or leads to inaction or pessimism as some western scholars maintain. Undoubtedly, Vedic culture lays great stress on spirituality, but it does not ask us to neglect material progress. Spirituality must have the upper hand, but material advancement should

not be overlooked. Both should go hand in hand. The very definition of Dharma, according to the Shastras is :

यतोऽभ्युदयनिःश्रेयससिद्धिः स धर्मः ॥ (वैशेषिक दर्शन ११-२)

i.e. Dharma is that which leads to worldly prosperity and also emancipation.

This definition given by the sage Kanada in the Vaisheshika Darshana is based upon the Vedic mantras.

पावमानिर्दधन्तु न इमं लोकमथो अमुम् ॥

पावमानीः स्वस्त्यमनीस्तामिर्गच्छतिमानन्दनम् ।

पुण्यां ... यत्यमृतत्वं च गच्छति ॥

i.e. The Vedic Mantras revealed by God who is the Purifier of all lead us towards worldly prosperity and emancipation at the end as their teachings are comprehensive and synthetic.

The Vedas are full of Mantras which make a mention of aeroplanes, steamers, submarines, railways, telegraphs and spacious buildings with a thousand pillars. These references give the lie to the charge that the Vedic Culture neglects material progress.

Those who would like to know details about the various sciences in the Vedas including information about the steamers, aircrafts, telegraphs, railways, submarines etc. should study the following books in English besides many in Hindi.

1. Vedic Culture by Pandit Ganga Prasad M.A.
2. Material Sciences in the Vedas by Shri Panna Lal Panihar B.A. LL.B.
3. Introduction to the commentary of the four Vedas by Maharshi Dayananda Saraswati.
4. Sciences in the Vedas by Acharya Vaidya Nath Shastri M. A. published by the Sarvadeshik Arya Pratinidhi Sabha, Maharshi Dayananda Bhawan, Ram Leela Ground, New Delhi.
5. Vedic Fathers of Geology by N.B. Pavagi
6. The Vedic gods as Figures of Biology by Dr. V.G. Rela L.M.B S.C. etc.

As to the idea that the Vedic culture leads to inaction and pessimism, I may emphatically say that the idea is entirely wrong.

In the Yajurveda 40.2 it is clearly stated :

कुर्वन्नेवेह कर्माणि जिजीविषेच्छतं समाः ।

एवं त्वयि नान्यथेतोऽस्ति न कर्मलिप्यते नरे ॥

i.e. A man should desire to live for a hundred years unselfishly. Thus alone and not otherwise can he be unattached to the action done by him.

This mantra has also been repeated in the Ishopanished. This unequivocal instruction given in such unambiguous terms is by itself sufficient to contradict the erroneous idea that the Vedic religion or culture advocates inaction. The Vedas enjoin upon us to be victorious in the battle of life. The following mantra from the Rigveda occurs in the Atharva Veda also with slight variation.

अश्मन्वती रीयते संरभध्वम् उत्तिष्ठत प्रतरता सखायः ।

अत्रा जहाम ये असन् शिवान् वयमुत्तरेमेभिवाजान् ॥

(Rig. 10-53-2 Ath. 12-2-26)

i.e. The stream filled with stones flows on; move together. Hold your heads high and cross it over my friends. Here let us leave those who are opposed to good and let us crossover to powers that are beneficent.

Here the stream filled with stones implies our life with difficulties.

We must hold our heads high, conduct ourselves heroically and get over those difficulties. There should not be any compromise with the powers of evil. In the Sama Veda 18-61 also the following verse asks us to go forward and remain indomitable.

प्रेता जयता नर इन्द्रोवः शर्म यच्छतु ।

उग्रा वः सन्तु बाह्वोऽनाघृण्या यथा सथ ॥

Go forward and conquer, have May God give you protection and happiness. Valiant be your arms so that you may remain indomitable.

Such are some of the fundamental features of the Universal Vedic Culture. The welfare of the whole world lies in following these and other sublime teachings of the Vedic culture.
Anand Kutir-Jwalapur (U. P.)

Zoology in Vedic & Classical Sanskrit Literature

By

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It is a fact now well recognised that Sanskrit literature, specially of the ancient periods is full of a wealth of knowledge which was based on actual observations of the people of those days and which is of great importance to the science today. While Mathematics, Physics, Chemistry, Technology, Astronomy, Architecture etc. have received their own share of knowledge from this literature, Biological Sciences like Zoology, Botany, Medicine and Agriculture have also not been the lesser gainers. On a close survey of Sanskrit literature from a Zoological point of view, the author has realised that this literature has a lot of information which can not only add useful chapters to the history of Zoology but can also bring out facts of importance to the various branches of pure and applied Zoology. Little has, however, been done to unearth this treasure. The present paper makes an attempt to reveal this knowledge both in *Vedic* as well as in *Classical Sanskrit* and also to give relevant references at the proper places to show what has been done in this field. The subject as presented here has been divided into convenient branches of Zoology, such as : Natural History; Anatomy and Physiology; Reproduction, Embryology and Genetics; Origin and Evolution of Life; Taxonomy; Economic Zoology; etc. Contributions of Sanskrit to each of these branches have been described.

NATURAL HISTORY

Natural history deals with the life and behaviour of animals in their natural surroundings. From the earliest times the greatest Indian sages, writers and poets of Sanskrit had been living in close association with Nature, keenly observing her phenomena. They had their own emotions and inspirations from these phenomena and most of them had employed poetry as a medium of expression of those emotions. It is no wonder therefore that most of the scientific observations have been passed on by them through the medium

of Sanskrit poetry. Raja (1962, p. 217) correctly remarks that "from the earliest times, Sanskrit poetry has been noted for its Nature element. The *Rigveda* and the *Atharvaveda* are both high class Nature poetry. So are two *Itihasas* the *Mahabharata* of *Veda Vyasa* and the *Ramayana* of *Valmiki*. *Kalidasa* and *Bhavabhuti* too come within the group of Nature poets. "According to Macdonell (1899, p. 298) "Nature occupies a much more important place in Sanskrit plays. The characters are surrounded by Nature, with which they are in constant communion. The mango and other trees, creepers and lotuses, pale red trumpet flowers, gazelles, flamingoes, bright hued parrots, and Indian cuckoos, in the midst of which they move, are often addressed by them and form an essential part of their lives. Hence the influence of Nature on the minds of lovers is much dwelt on. Prominent everywhere in classical Sanskrit poetry these elements of Nature luxuriate most of all in the Indian drama." The Sanskrit treasure of Natural History is therefore rich and it only requires a thorough probe, proper understanding and correct interpretation of the same to add to our modern knowledge about the habits and habitats of animals. A few examples should suffice to illustrate this fact.

The hymn vii. 103 of *Rigveda* is reproduced below in its English rendering from Macdonell (1899, p. 102):—

Resting in silence for a year,
As *Brahmans* practising a vow,
The frogs have lifted up their voice,
Excited when *Parjanya* comes.

When one repeats the utterance of the other
Like those who learn the lesson of their teacher,
Then every limb of yours seems to be swelling,
As eloquent ye prate upon the waters.
As *Brahmans* at the mighty *soma* offering
Sit round the large and brimming vessel talking,
So throng ye round the pool to hallow
This day of all the year that brings the rain-time.
These *Brahmans* with their *soma* raise their voices,
Performing punctually their yearly worship;

And these *Adhvaryus*, sweating with their kettles,
These priests come forth to view, and none are hidden.

The twelvemonth's god-sent order they have guarded.
 And never do these men neglect the season.
 When in the year the rainy time commences,
 Those who were heated kettles gain deliverance.

From this hymn the following facts about the habits and habitat of frogs can easily be gathered :

(i) Before the beginning of the rainy season the frogs rest in silence, clearly pointing to their important habit of hibernation and aestivation.

(ii) With the first rain of the rainy season after summer they are stimulated to activity and utter their loud croaks.

(iii) In croaking one repeats the utterance of the other.

(iv) Their bodies swell up when they utter their loud croaks in their aquatic environment.

(v) On the first rainy day they throng and sit round a pool indicating their habitat in or near water.

(vi) There is a strict regular annual periodicity of the habits mentioned above.

It is needless to mention that even the most elementary text book of Zoology shall confirm to these habits and habitat of frog. Similes used in the hymn have given a graphic effect to the description.

An etymological analysis of the Sanskrit words used for animals gives a good clue to some of their important habits and also to the habitat. The *Namalinganusasana* or the *Amarakosa*, an important work on Sanskrit lexicography gives seven synonyms for frog and each of them points to some of its important habits or habitat as follows :—

1. *Bheka*—Terrifies.
2. *Manduka*—Gives a good look to the aquatic environment.
3. *Varsabhu*—Occurs or appears during rains.
4. *Salura*—Possesses a fast gait or shines.
5. *Plava*—Jumps or floats.
6. *Dardura*—Has a ear-tearing or loud croak.

Hora (1948a) has derived a lot of useful information about the Natural History of fishes from the 22 Sanskrit words used for them.

According to Rao (1957) there are references to over 250 species of animals, Vertebrates and Invertebrates, in *Vedic literature* and a wealth of information exists about their Natural History.

The Vertebrates mentioned include all the five classes : Pisces, Amphibia, Reptilia, Aves, and Mammalia; while the Invertebrates are mostly Arthropods, the class Insecta predominating. Rao also mentions that in the *Agni* and the *Bhavisya Puranas*, there are a number of observations on the structure and habits of snakes, some of which according to him approximate to modern verified and recorded facts while others appear to be fanciful as yet.

Shastry (1963) gives the information that "that entire 24th chapter of the *Yajurveda* contains rich material regarding this branch (Zoology). More than a hundred animals and birds have been described. x x x x. 21 kinds of snakes, male and female worms of various colours, microscopic bacteria and insects of terrestrial and aquatic origin have been referred to."

Hora (1951a) points out that in *Susruta Samhita* there is a clear indication to the knowledge of fishes with special reference to their form in relation to their habits, habitats and locomotion. In another paper (1951c) he refers to *Matsyavinoda* or a chapter on angling in the *Manasollasa* composed by King *Somesvara* in 1127 A.D. There are about 52 verses in this chapter containing references to about 37 different types of fishes. On the basis of characters and habits mentioned in the verses and also on the basis of the etymological analysis of the Sanskrit names used, Hora has made efforts to identify these fishes and has derived a good deal of information on their structure, habits and habitats.

Roy (1963) gives the Sanskrit names of about six insects, 7 fishes, 6 reptiles, 14 birds, and 34 mammals found in the *Ramayana* of *Valmiki*.

In the works of *Kalidasa* there are vivid descriptions of the Natural History of a number of animals, such as : corals, about 18 insects, 2 arachnids, 2 molluscs, fishes, frogs, snakes and crocodiles, 18 birds, and 15 mammals. Gupta (1957, 1958, 1960a, b, 1961, 1962) has examined in detail the ornithological information available from the works of *Kalidasa* and has pointed out facts of great importance available from them about the Natural History of pigeons, peafowls, cuckoo, sarus crane, egret, and *hamsa* (a goose ?) respectively. He has referred to the acute observations of *Kalidasa* on external features, habits, habitat, distribution, seasonal life, song, dance, courtship, breeding habits, parental care and migration etc. of these birds. Further Gupta (1963) has also probed thoroughly the works of *Kalidasa* from an entomological point of

view and has gathered important scientific information from nearly 50 verses about the Natural History of 18 insects : *ali*, *bhramara*, *bhringa*, *damsa*, *dvirepha*, *Khadyota*, *laksa* insect, *madhukara*, *madhumaksika*, *madhupa*, *patanga*, *pipilika*, *salabha*, *saragha*, *satpada*, *silimukha*, silkworm, *valmi*. He has made efforts to identify these insects and has revealed knowledge of *Kalidasa* about insects concerning such facts as their habits ; habitat ; distribution ; external features ; gregarious nature ; locomotion senses of smell, taste and of color ; attraction to light and fire ; reaction to rain, wind and temperature ; mimicry ; sound production ; luminosity ; plant associations ; seasonal life ; courtship ; termitaria hills and termitophilous fauna, as well as economic aspects such as : pollination ; production of honey, of silk from cocoon, and of lac ; annoyance to man and cattle by bite ; locust menace etc.

ANATOMY AND PHYSIOLOGY

Seal (1902) has shown that the Sanskrit writers like *Caraka*, *Prasastapada*, *Susruta*, *Sankara*, and *Umasvati* reveal in their works a familiarity with the anatomical details of animals and that Sanskrit literature contains advanced ideas on metabolism, circulatory system, nervous system, etc.

Rele (1931) in his description of the *Vedic* gods as figures of biology, observes that "a blending of anatomical and physiological facts (masked in allegorical forms) with abstract physiological truths is clearly evident in the teachings of the *Upanisads*." Shastri (1963) writing on Anatomy and Physiology of the *Vedas* remarks that "high-graded knowledge of various internal and external organs of the body and its various systems had been acquired by the *Vedic Risis*. Detailed references are available specially in *Atharvaveda* in this field also." According to Kutumbiah (1963) "From the point of view of the development of Indian medicine the rational element contained in the *Atharvaveda* is significant. In A.V.X. 2 is a hymn, in which the several parts of the skeleton are carefully and orderly enumerated. This enumeration formed the basis of the osteology of the *Atreya-Caraka* school of classic medicine. In A.V. 11.33 almost all the important organs of the body are enumerated. In A.V.I. 17.5 are mentioned *dhamanis* and *siras*, names familiar in classic medicine."

Misra and Pandeya (1963) are of the opinion that *Susruta Samhita* is the first ancient Sanskrit work which deals systematically

and in great detail, with the development and anatomical structure of the eye, as well as with the physiological factors of the ocular apparatus in connection with the diseases of the eye.

Roy (1967) has dealt with in great detail the Anatomy in *Vedic* literature and in an abstract form, the observations made are as follows :-

“In the *Vedic* literature we meet with descriptions of the structure of the human body, which reveal that the anatomical knowledge of the Ancient Indians was of no mean order. In the present paper an account of this knowledge has been reported along with those developed in other contemporary nations of the world. Descriptions are found, in the *Vedic* literature, of all important bones and other bodily parts which confirm more or less to our modern knowledge.”

This description shows an evolution of the anatomical knowledge of the Ancient Indians : The *Samhitas* present a description of the general structure of the human body. In the *Brahmanas* a detailed account of the chest, neck and back portion of the body, ribs, abdominal portion and the hand is found to occur. A similar account of the human heart, nervous system, sense organs is given in the *Aranyakas* and the *Upanisads*.”

Chaudhary (1967) refers to the fact that in *Yajnavalkya Smriti* “*Yajnavalkya* mentions the six *dhatus* (primary substances), six constituent parts of the body, three hundred and sixty bones, and the five organs of action and perception. While mentioning the vital parts of the body, *Yajnavalkya* gives more or less a detailed description of the whole human body. The number of veins, sinews, arteries, muscles and nerves and also the number of the cavities throughout the whole body and also the quantity of the fluid in the body have been mentioned.”

Murthy (1968) informs us that the *Brahmanas*, a part of the *Vedic* literature in prose, show a clear understanding of Physiology based on Anatomy.

According to Mishra (1968) “*Agni Purana*, an encyclopaedic work of about 10-11 century A.D. discusses, in course of its physiological deliberations, ideas on the development of human body, obstetrics, Physiology and Anatomy”.

REPRODUCTION, EMBRYOLOGY, AND GENETICS

According to Macdonell (1899), there are two sacraments in

the *Grihya Sutras* aimed at the obtainment of the son. One is *Pum-savana* sacrament (p. 212) in which the pounded shoot of a banyan tree is placed in the wife's nostril. Another (p. 214) is connected with one of the marriage ceremonies when wife is conducted to her husband's house, seated on the hide of a red bull, and upon her lap is placed the son of a woman who had only borne living male children. The ideas aim at methods of sex-determination and it requires proper interpretation and experimentation to appreciate how far, if at all, they are really scientific.

On the inheritance of mental traits, the two pedigrees of the ancient Sanskrit works make interesting comparisons with the pedigrees studied in modern Genetics. According to Raja (1962, p. 58) *Veda Vyasa*, the author of *Mahabharata* was the "son of the Vedic poet *Parasara* through a girl belonging to the fisherman community. The king of those days named *Santanu* met that girl at the same place and he fell in love with her and wanted to marry her. But he had already a queen and also a son, and the father of the girl refused her hand to the king unless that girl could become the real queen, with her son as heir to the throne. So his son, named *Bhisma*, renounced his claims to the throne and also took a vow not to marry, so that there would be no possibility of any rival to the throne when the newly married wife would have a son. Such a son was born, named *Vicitravirya*, who became king in due course. But he died young without a son born to him. His mother, who was also the mother of *Veda Vyasa*, asked *Veda Vyasa* to beget children by the two queens who were his sisters-in-law. In one queen was born through his union a son named *Dhritarastra* and in the other, another son named *Pandu*. *Dhritarastra* was blind and so when the sons came of age, the younger son *Pandu* became the king. *Pandu* had five sons (called *Pandavas* representing goodness) and *Dhritarastra* had a hundred sons (called *Kauravas* representing evil). *Yudhishthira* was the eldest son of *Pandu* and *Suyodhana* was the eldest son of *Dhritarastra*. "Here the five sons of *Pandu* called *Pandavas* represent a pedigree of goodness, while the hundred sons of *Dhritarastra*, called *Kauravas* represent a pedigree of evil. In another pedigree mentioned by Raja (1962, p. 89) gods and demons were descendants of the same ancestor, the gods being the sons of one mother and the demons being the sons of her rival. It is advisable and instructive to compare these pedigrees with the pedigrees of modern Genetics briefly described by Storer and Usinger (1957

p. 175)—“The ‘Jukes’ family, studied by Dugdale and Estabrook, is one of bad pedigrees that was traced through several generations. From the marriage of a shiftless farmer’s son and a prostitute, a total of 2,094 descendants was identified; these included 299 paupers, 118 criminals, 378 prostitutes, and 86 brothel keepers. There was a general record of intemperance and illegitimate births, and half the total were feeble-minded. The ‘Kallikak’ family, analysed by Goddard, presented an even more interesting situation. Martin Kallikak had a son by a feeble-minded girl, then married into a respectable family, and produced several children whose descendants became worthy members of the society. The illegitimate feeble-minded son, however, sired a degenerate line comparable with that of Jukes family.”

On the transmission of specific characters and on the question as to why the offspring is the same as the parental organism, that is, ‘why like begets like’ *Caraka* and *Susruta* have to say, “All organs are potentially present at the same time in the fertilised ovum and unfold in a certain order. As the sprouting bamboo seed contains in miniature the entire structure of the bamboo, as the mango blossom contains the stone, pulp and fibres which appear separated and distinct in the ripe fruit, but through excessive minuteness are indistinguishable in the blossom, even such is the case with man.” (Tulukdar, 1963). It goes without saying that the seeds of modern Genetics had already been sown in the Ancient Sanskrit texts.

Keswani (1963) deals exhaustively with the knowledge concerning reproduction, human Embryology and Genetics as found in the early Sanskrit works. According to him the numerous extant scriptures and other writings of purely philosophical and scientific nature are replete with the ideas that our ancient scholars had regarding generation, reproduction, Genetics and heredity and human developmental Anatomy. The principal works mentioned by him containing these ideas are: the *Vedas*, *Upanisads* (*Chandogya*, *Brihadaranyaka*, *Garbha*, etc.), *Anugita*, *Setapatha Brahmana*, *Manu Smṛti*, *Samhitas* of *Atreya*, *Susruta*, *Caraka* and *Vagbhata*, *Puranas* (*Padma*, *Vishnu*, etc.) and some Tantric texts. He deals with the ideas of the physical nature of the primal seed, of conception and menstruation, and then remarks that in the works of the Sanskrit writers mentioned “the various developmental stages of the human embryo from the time of its fertilisation until full term have been so well described that one is amazed at the acuity of their observa-

tions. The only inference one can therefore draw is that they must have had some sort of aid of optical instruments to be able to describe even the microscopic appearance of the early zygote and must have studied embryogenesis in experimental animals; or that it was their routine practice to examine and even dissect the abortus and the still-born. Keswani then examines in detail the ideas of the Sanskrit works about organogenesis, histogenesis, formation of the placenta, determination and prediction of sex, eugenics and genetic transmission of characteristics. Some of these ideas are fairly comparable with the ideas of modern Zoology. For example, according to *Susruta*, as stated by *Garbha Upanisad* also, "a seed divided into two by the deranged *Vayu* within the cavity of the uterus gives rise to the birth of twins. The process of production of identical twins in the modern Genetics is exactly the same (Storer and Usinger, 1957, p.173).

Bose (1963) refers to the fact that Manu "believed firmly in the hereditary transmissibility of character. The quotations from the two chapters of *Manusamhita* translated by Sir William Jones, clearly indicate the nature of the theory of heredity. Chapters IX and X discuss the influence of both parents in the determination of the characters of the offspring".

Chaudhary (1967) deals with the knowledge concerning Embryology of the human body as contained in the *Yajnavalka Smriti* in which according to him there is a description of the development of the human body from its embryonic to the full grown stage in all its parts.

Majumdar (1968) mentions that "Laksmidhara, the minister of the Gahadvala King Govinda Chandra, grandfather of Jayachandra quotes in his *Grihastha Kanda* of the *Krtyakalpataru* (c. 1120 A.D.) twelve verses from *Narada* explaining fourteen kinds of sexual aberrations and impotence and states that, if unwittingly one has given in marriage his daughter to such a person, he should get his son-in-law treated medically and, if the treatment proves ineffective, the girl should be married to another". The ideas contained in this reference are good contributions to the science of Eugenics.

According to Mishra (1968) the *Agni Purana* gives an account of the process of conception, monthwise development of the Embryo and the factors responsible for the development of the various organs of the human body.

ECOLOGY

Ecology is the study of the relations of animals to their environment. This environment may be physical consisting of abiotic factors like temperature, light, moisture, air, etc. or it may be biotic environment consisting of animals and plants influencing the life of other animals. Sanskrit literature contributes a lot to this branch of Zoology.

"The *Rigveda* is essentially Nature poetry, dealing with certain powers in Nature;" (Raja 1962, p. 21); "for the gods who are invoked are nearly all personifications of the phenomena of Nature." (Macdonell 1899, p. 53). Variations in the movement of the sun cause variations in the intensity of light resulting in dawn, day, dusk, and night. Sun god or *Surya* is one of the solar deities who measures the days, prolongs life and drives away disease; all beings depend on *Surya* and so he is called "all-creating" (Macdonell 1899, p. 64). This may be interpreted to mean that the sun provides energy for photosynthesis resulting in the manufacture of initial food essential for life. *Usas*, the goddess of dawn in *Rigveda* has her own effect on animal life." She awakens the creatures that have feet, and makes the birds fly up. When *Usas* shines forth, the birds fly up from their nests and men seek nourishment" (Macdonell 1899, p. 67). *Savitri* is another solar deity of the *Rigveda* "not infrequently connected with the evening, being in one hymn (ii. 38) extolled as the setting sun"; and its effect on animal life has been described as just the opposite to that of *Usas*, in that the birds all seek their nests and the cattle their sheds (Macdonell 1899, p. 64, 65.) Night is represented by the goddess *Ratri* in hymn x. 127 of the *Rigveda* and its effect on animal life is that at her approach the birds seek their nests upon the trees, the active beasts and flying birds, as well as hungry hawks (meaning probably the active hawks preying for food) come to rest and stop their activity; while the male and female wolves become active and may prove harmful to men (Macdonell 1899, p. 84). In hymn v. 83 of the *Rigveda*, there is a description of the activity of *Parjanya*, the god of rain. Macdonell (1899, p. 76) gives an English rendering of this hymn from which the modifying effect of the rain on biotic and abiotic environment can be analysed somewhat like this: (i) under a strong rain storm the trees fall to the earth; (ii) lions roar and the roar reverberates from far off places; (iii) the winds blow forth; (iv) the lightening flashes fall to the earth; (v) the herbs shoot up; (vi)

nourishment in abundance springs for up all world at a time when *Parjanya* (rain) quickens the earth with seed; (vii) there is thunder and there is roar; (viii) "the vital germ deposit" meaning that the environment is rich with reproduction and new life; (ix) the abundance of moisture (i.e. water) makes the heights and hollows equal, meaning that during very heavy rains, the rivers and streams are in spate resulting in terrible floods when even the mountains may be so much under water that there is left no distinction between them and the low-lying land. The whole description beautifully depicts the inter-relationship of different environmental factors. *Agni* is fire god of *Rigveda* and its rage in the forests has a terrible effect on forest life and on the environment of the forests, a few facts about which gathered from Macdonell (1899, p. 78) are worth mentioning: (i) driven by the wind the fire rushes through the wood; (ii) *Agni* invades the forests and shears the hairs off the earth, shaving it as a barber a beard, meaning that the forest fires destroy all plant and animal life; (iii) the flames are like the roaring waves of the sea bellowing like a bull and the birds are terrified at this noise as well as on the sight of the rising grass-devouring sparks.

The *Ritusamhara* of *Kalidasa* is a monographic type of work on the biology of the seasons. The year has been divided into six seasons: (1) summer, (2) rainy, (3) autumn, (4) cold, (5) cool or deway, and (6) spring. There are lively descriptions of animal and plant life and also of abiotic conditions in each of these seasons. Not only in *Ritusamhara* but also in other works of *Kalidasa* there lies scattered valuable information about the effect of seasons on animal life. Examples of facts concerning animal life in summer gathered from the works of *Kalidasa* specially from the *Ritusamhara* will illustrate the sharp and scientific observations of this great poet. They are as follows :

All life in summer is dull. Wild animals appear thirsty with their tongues dry. They run to forests in distant horizon taking the blue sky to be water to quench their thirst. Wild boars dig out earth with their long snouts as if they want to go under the ground surface to avoid heat. Elephants collect in ponds, lakes or rivers to drink water and to cool themselves; and consequently fish in great numbers are trampled under their feet so that the fish population of these places is much reduced, as well as the water birds run away from there out of fear. Forest fires so common in summer put a great stress upon the wild life. Buffaloes pour out foams and saliva from their mouths; with open mouths as well as

with their red tongues out they come out of the mountain caves and proceed towards water to quench their thirst. Birds sitting on leafless trees are panting for breath. Sad monkeys in large numbers enter mountain caves to take shelter against heat. Beasts roam here and there in search of water which at most of the places dries up. Perplexed by heat aggressive animals loose their aggression, for example: snakes do not harm their enemies the frogs who come out of the ponds and take shelter under the shade of the hoods of thirsty snakes without any fear; peacocks, the great enemies of the snakes, have now become friends to them in the sense that a snake under the torture of heat hissing and with its mouth bent downwards moves without fear under the shade provided by the body of the peacock who, instead of doing any harm to the snake, puts its neck in the coils of the snake to project its mouth against the burning sun; lions or tigers are panting for breath, licking their lips with their tongues and are not in a mood to fight with the elephants standing nearby; the elephants with foams falling from their mouths wander here and there in search of water without any fear of lions; troubled and somewhat burnt with forest fires, elephants, lions and oxen become friends, escape together from the flames and take rest together on the sands of the river banks. These examples illustrate the important ecological phenomenon that in the face of a common enemy the deadliest enemies become friends. While most of the animal life has been described as dull, activity, however, may be seen in some insects hovering round the blooming jasmine flowers in the evening, and in some aquatic birds like geese and cranes.

In a similar way *Kalidasa* describes life in other seasons.

Some more descriptions of ecological importance found in the works of *Kalidasa* are as follows :

1. Life at sunset-*Kumarasambhava*, VIII. 30-39.
2. Fauna of a deserted place-*Raghuvamsa*, XVI. 12-22.
3. Regional descriptions : (i) of a particular forest-*Raghuvamsa* IX. 51-74; (ii) of a particular mountain *Kumarasambhava*, I. 1-16.
4. Aerial survey of land and sea--In the 13th Canto of *Raghuvamsa* *Kalidasa* describes the journey of *Rama* in his aerial car from *Coylon* to *Ayodhya* after his victory over *Ravana*. The car passes over the southern sea, Malaya mountains, Godavari, Citrakuta, Jamuna, Ganga, and Sarayu. The fauna, flora, forests, mountains, rivers, lakes and sea coast of this region as seen in the

aerial view have been given a graphic description which is recognised as one of the best in Sanskrit literature. Some important observations in this aerial survey about fauna should provide interesting examples :

(i) Crocodiles are seen taking into their mouths fishes along-with sea water and then squirting out the streams of water through their nostrils after closing their mouths.

(ii) Snakes are seen lying in wavy posture along the sea coast to breathe the coastal air.

(iii) There are red coral reefs along the coast. When conches strike against the corals, their mouths are pierced and out of the resulting pain their movements are slowed.

(iv) Pearl mussels and pearls lie scattered on coastal sands.

(v) There are deer herds in forests south of Malaya mountains.

(vi) There is an indication of the presence of peacocks on Malaya mountains and about their sweet songs when *Rama* had been roaming there during his exile.

(vii) The view has been vividly described about water birds, as for example: the courtship between male and female *cakravaka*, the Brahmani duck; the swimming of the cranes on the waters of the rivers; the flights upwards of the cranes in characteristic formation; etc.

The ninth act of the *Malatimadhava* of *Bhavabhuti* gives a regional description of the Vindhya range with its fauna and flora in their natural surroundings, and the seventh act of the *Mahavira-carita* of the same poet represents the journey of *Rama* in an aerial car from Ceylon all over the way to Ayodhya (Macdonell 1899, p. 308),

The descriptions in the works of *Kalidasa* and in those of *Bhavabhuti* about Nature may be regarded as most scientific because these poets represented and described Nature as they observed her. In this connection the remarks of Raja (1962, pp. 142 and 189) are worth quoting here :

"In the matter of the description of Nature also *Kalidasa* presented what he felt in his heart, while the later poets presented what they knew in their erudition. Nature had lost its life, though the beauty of Nature was retained; this beauty became what the poet knew from books and not from observing Nature."

"*Bhavabhuti* is also a master in the description of Nature, and it is the grand aspect of Nature that he loves most. In the various

dramas sketched above there are few in which there is anything that can be called Nature. It is only in *Kalidasa* that there is a dominance of Nature, and this is true also of the epic poems. What Nature there is in the later epics are descriptions of Nature that the poets knew in their erudition and not what they felt in their heart. After *Kalidasa* we come here to another poet who has known Nature in his heart and who has realised and enjoyed the beauties of Nature, and who has been able to express such beauties of Nature in poetic language. He loved Nature as did *Kalidasa* and he wrote poetry because he felt and realised the beauties of Nature; he was in communion with Nature."

In *Susruta Samhita* there is the idea of the classification of habitats and a correlation between the form of fishes and their respective habitats and it is further remarkable that these correlations were even explained against the background of environmental factors (Hora, 1951 a). Similar ideas of classification based on ecology are also found in *Chandogya Upanisad* (Rao, 1975).

ORIGIN AND EVOLUTION OF LIFE

Valuable information lies buried in Sanskrit literature on the philosophy of Zoology concerning origin and evolution of life. The works in which it is contained are :--*Rigveda*; *Atharavaveda*; *Brihadaranyaka Upanisad*; *Satapatha Brahmana*; *Puranas*; *Mahabharata*; *Manusmriti*; *Caraka Samhita* and works on *Sankhya*, *Yoga*, *Vaisesika* and *Nyaya* systems of philosophy. The subject has been discussed by a number of workers: Macdonell (1899); Seal (1902); Chakravarti (1951); Majumdar (1953); Hora (1955); Ghosal (1957); Sen (1963); Keswani (1963); Ali (1963); Subbaryappa (1966); and Rensch (1966). Ali (1963) remarks that ideas on the evolution of life on this planet have been brought out by the ancients in very interesting way, and what is more surprising, in consonance with modern views on the subject.

TAXONOMY

Taxonomy or Systematic Zoology is the study of the classification of animals and of its principles. Classifications of animals have been attempted in *Rigveda*, *Atharavaveda*, *Chandogya Upanisad*, *Manusmriti*, and in the works of *Susruta*, *Patanjali*, *Prasastapada* and *Caraka*. Most of these classifications have been artificial as based on habits, habitats, environmental factors, and reproduction. A classification which may be called somewhat natural, as to some

extent based on structural characters, is that found in the Jaina work *Tattvarthadhigama* of *Umasvati* considered to be of 40 A.D. but now established to belong to 135 B.C. (Keswani, 1963).

Rao (1957) and Keswani (1963) have discussed all these classification in detail.

ECONOMIC ZOOLOGY

Indications are there that throughout Sanskrit literature animals have been regarded as both useful and harmful. Some important information about this economic aspect is considered here.

USEFULNESS

Food—Milk and butter obtained from cows are mentioned as food in *Rigveda* (Macdonell, 1899, pp. 126, 139). Fish was regarded as an important article of food and the information about fish as food in Sanskrit works has been very well brought out by Hora (1948b, 1950, and 1951a, b, c, d). In addition to fish, wild beasts, birds, elephants and tigers have been recommended during famine to be used as food, in *Kautilya's Arthashastra* (Hora, 1948b).

Ride and transport—According to Raja (1962), the *Vedas* and *Sanskrit Classics* speak of certain animals used by gods for riding in their vehicles, the chariots. Some examples are as follow :—

| Name of god | Animal used |
|--------------------|-------------|
| <i>Asvins</i> | donkey |
| <i>Visnu</i> | kite |
| <i>Siva</i> | bull |
| <i>Durga</i> | tiger |
| <i>Brahma</i> | swan |
| <i>Ganesa</i> | rat |
| <i>Subrahmanya</i> | peacock |

According to Macdonell (1899, pp. 126, 127), bulls and oxen have been mentioned in *Rigveda* as being used for drawing carts, horses in drawing the war cars and in chariot races.

Owing probably to the military needs of horses and elephants the science of these two animals appears to have been very well developed in India and there are some Sanskrit works of uncertain dates on the knowledge about these animals. "The *Hastyayurveda* of uncertain date and the *Matangalila* of *Narayana* are the two known works on the science of elephants. The *Asvayurveda* of *Gana*, the *Asvavaidyaka* of *Jayadatta* and of *Dipankara*, the *Yogamanjari* of *Vardhamana* and the *Asvacikitsa* of *Nakula* are extant works on the science of horses." (Sastri, 1960, p. 172).

Hunting, tracking and guarding—In *Rigveda* has been mentioned the use of dogs for the purpose of hunting, guarding and tracking the cattle and keeping watch at night (Macdonell, 1899, p. 126). In hymn x. 108 of the *Rigveda*, *Sarama*, the famous bitch of the gods, the messenger of *Indra* tracks the stolen cows (Macdonell, 1899, p. 100).

As messengers and emissaries—In addition to the bitch *Sarama*, as messenger of *Indra* mentioned above, her two sons, the dogs, as well as animals like owl and pigeon are occasionally referred to as regular messengers of *Yama* in the *Rigveda* (Macdonell, 1899, p. 98). *Hanumana*, the monkey chief, as messenger from *Rama* to *Sita* is known to everybody. Sastri (1960) remarks that in Sanskrit literature there are about 50 *Dutakavyas* and that in addition to other objects, beasts and birds have been chosen as messengers for imaginary journeys over different places in India.

According to Hora (1948b), a peculiar use of animals for a like function is mentioned in the *Kautilya's Arthasastra*, Book XIII, Chapter V dealing with the operation of a siege. "*Kautilya* advises the reduction of the enemy before the commencement of the siege, and, among a large number of other measure suggests :

'A splinter of fire kept in the body of a dried fish may be caused to be carried by a monkey or a crow, or any other bird (to the thatched roof of the houses) (p. 468)". In explanation Hora further adds that "a splinter of fire kept in the body of dried fish is not likely to go out since there is always a certain amount of body oil that will come out from dried fish when heated and this will keep the splinter alive."

There have been reports, according to Aslam (1971), that a large number of trained monkeys helped the Indian army and Mukti Bahini in Bangla Desh against the occupation forces of West Pakistan. He adds that the people should not be astonished to hear this as he gives in detail the story of "All Alone", a tiny pigeon which played a key role in the defeat of Hitler in the last war by bringing vital information from occupied Europe to Britain against all odds of the trained hawks of German troops. When such is the case in modern history, it is really no wonder if the use of animals in war for purposes like those mentioned above are found in Sanskrit literature.

As ingredients in smoke mixtures against enemies—Hora (1948b) mentions fish, certain insects (as *indragopa* the cochineal insect) and hoofs and horns of goats as ingredients of mixtures to

produce such a smoke on burning that it destroys animal life as far as it is carried off by the wind, or may cause blindness. Such mixtures according to him are mentioned in *Kautilya's Arthashastra*.

In Agriculture—Use of bulls for drawing the plough is mentioned in the *Vedas* (Macdonell, 1899, p. 140) and in the *Parasara* (Raichaudhari, 1963).

In Medicine—Hymn ix. 112 of the *Rigveda* mentions the use of leeches to cure fracture (Macdonell, 1899, p. (108). The use of animal tissues to fasten the edges of flaps of skin in plastic surgery and the use of dead animals to demonstrate venesection of blood vessels to the medical students is mentioned in *Susruta Samhita*; while the works of *Caraka* and *Susruta* embrace a number of animal substances used as drugs, such as: milk from humans, cows, elephants, camels, goats and mares; butter, honey, meat, bile, blood, and urine; horns, claws and nails. (Misra and Pandeya, 1963). Dash (1968) gives a number of animal products mentioned in Sanskrit literature for the use of sterilisation and contraception; for examples : the bone of water fowl; the tooth of a boar; hair from the trunk of an elephant and from the tail of a horse; goat's milk; egg of sparrow; dung of elephant; blood of rabbit; etc. Mitra (1968) refers to the fact that information on the use of animals to test the properties of medicinal plants and drugs and also to test whether a particular food is poisonous or not, lies scattered in *Atharvaveda* and in the works of *Caraka* and *Susruta*. He adds that the animals used for this purpose were: boars, mongooses, snakes, goats, sheep, cows, dogs, *cakoras* (partridges), cuckoos, herons, parrots, monkeys, deer, etc. Further he says that the "people in Ancient India were well aware of the germ-free animals as in the present time; hence the association with goat and use of its meat advocated in the cases of tuberculosis".

Miscellaneous uses—The uses of sheep for wool, of horns for poisoned tips of arrows and of skins of animals for various purposes are mentioned in the *Rigveda* (Macdonell, 1899, pp. 138-141). Lac, honey and silk as insect products are referred to in the works of *Kalidasa* (Gupta, 1963). Besides this, Rao (1957) has mentioned a number of economic uses for various animal products.

HARMFULNESS

Atharvaveda speaks of noxious animals, injurious insects, poisonous insects and their bites; while *Grhya Sutras* make a mention of an offering made to serpents at the beginning of rains when the use

of raised bed is enjoined owing to the danger from snakes at that time (Macdonell 1899, pp. 155, 165, 215). *Atharvaveda* refers to the disease-producing worms, to insects as crop pests and also to the dangers from wild animals (Raja, 1962, p. 27). *Damsa* (probably a horsefly or gadfly), ants and locusts are mentioned as harmful insects in the works of *Kalidasa* (Gupta, 1963).

CONCLUSION

From what has been discussed above, it is clear that contributions of Sanskrit literature, to each of the branches mentioned above are significant and meaningful. The information given above is just an humble peep into the great window. The field is still virgin to a good extent and is full of great promises for prospective workers.

REFERENCES

- Ali, S.M. 1963. Geography in Ancient India. Proceedings of the Symposium on the History of Sciences in India held at Calcutta on August 4 and 5, 1961; *Bull Nat. Inst, Sci. India*, New Delhi, 21: 258-280.
- Aslam, M. 1971. The brave little bird. *Sunday World*, New Delhi, dated 26-12-71, page 9.
- Bose, N.K. 1963. Theory of heredity in *Manusamhita*. *Bull. Nat. Inst. Sci. India*, New Delhi, 21: 226-227.
- Chaudhary, M. 1967. The embryonic development and the human body in the *Yajnavalkya Smriti*. *I.J.H.S.*, New Delhi 2 (1): 52-60.
- Chakravarti, P. 1951. *Origin and development of Sankhya system of thought*. Metropolitan Printing and Publishing House Ltd., Calcutta.
- Dash, B. 1968. Methods for sterilisation and contraception in Ancient and Medieval India. *I.J.H.S.* New Delhi, 3 (1): 9-24.
- Ghosal, P. 1957. *Hindu Pranivijinan* (Hindu Zoology). Gurudas Chattopadhyaya & Sons, Calcutta.
- Gupta, C.S. 1957. Zoology in Ancient India—the pigeons of Kalidasa. *Tripathaga*, Lucknow, 2 (8): 89-92. (In Hindi)
- Gupta, C.S. 1958. Zoology in Ancient India—the peafowls of Kalidasa. *Tripathaga*, Lucknow, 3 (10): 49-72. (In Hindi).
- Gupta, C S. 1960a. Zoology in Ancient India—the cuckoo of Kalidasa. *Tripathaga*, Lucknow, 5 (10): 54-60. (In Hindi)

- Gupta, C.S. 1960b. Zoology in Ancient India—the sarus cranes of Kalidasa. *Tripathaga*, Lucknow, 6 (1): 84-88. (In-Hindi).
- Gupta, C.S. 1961. Zoology in Ancient India—the egrets of Kalidasa. *Tripathaga*, Lucknow, 6 (11): 33-36. (In Hindi)
- Gupta, C.S. 1962. Knowledge concerning 'hamsa' (a goose ?) in the works of Kalidasa (Aves : Anatidae). *Proc. Ist. All India Congr. Zool.* (Jabalpur Oct., 1959) Calcutta, Part 2 Scientific papers: 50-71.
- Gupta, C.S. 1963. Insects in the literature of Kalidasa. *Bull. Nat. Inst. Sci. India*, New Delhi, 21: 145-172.
- Gupta, C. S. 1968. Seasonal life of birds in the works of Kalidasa. Paper presented and read at the *Symposium on History of Sciences of India* held under the auspices of the National Commission for the compilation of the History of Sciences of India at the National Institute of Sciences of India, New Delhi on Oct. 17-20, 1968. *Abstracts of papers*, p. 9.
- Hora, S.L. 1948a. Sanskrit names of fish and their significance. *Journ. Asiat. Soc. Bengal, Science*, 14 (1) : 1-6.
- Hora, S.L. 1948b. Knowledge of the Ancient Hindus concerning fish and fisheries of India: 1. References to fishes in *Arthasas-tra* (Ca. 300 B.C.). *Ibid*, 14 (1): 7-10.
- Hora, S.L. 1950. *Ibid*: 2. Fishery legislation in Asoka's Pillar Edict V (246 B.C.). *Ibid*, 16 (1): 43-56.
- Hora, S.L. 1951a. Zoological knowledge with special reference to fish and fisheries in India before 225 B.C. *Archives Internationales D'Histoire Des Sciences*, Numero 15: 405-412.
- Hora, S.L. 1951b. Maintenance of irrigation tanks through fishery revenue in Ancient India. *Journ. Asiat. Soc. Bengal Letters*, 17 (1): 41-50.
- Hora, S.L. 1951c. Knowledge of the Ancient Hindus concerning fish and fisheries of India: 3. *Matsyavinoda* or a chapter on Angling in the *Manasollasa* by king Somesvara (1127 A.D.) *Ibid*, 17 (2): 145-169.
- Hora, S.L. 1951d. A Sanskrit work on angling of the early twelfth century. *Nature*, 167: 778.
- Hora, S.L. 1950. Glimpses of evolutionary thought among the Ancient Hindus. *Bull. Nat. Inst. Sci. India*, 7: 19-24.
- Keswani, N.H. 1963. The concepts of generation, reproduction, evolution and human development as found in the writings of Indian (Hindu) scholars during the early period (up to 1200

- A.D.) of Indian history. *Bull. Nat. Inst. Sci. India*, New Delhi, **21**: 206-225.
- Kutumbiah, P. 1963. History of Indian medicine: from ancient times to 1200 A.D. *Bull. Nat. Inst. Sci. India*, New Delhi, **21** 173-183.
- Macdonell, A.A. 1899. *A History of Sanskrit Literature*. New ed. (1962). Motilal Banarsidass, Delhi.
- Majumdar, B. 1968. Chronological problems about the literary sources of scientific ideas in India. *Symposium on History of Sciences of India NISI*, New Delhi—*Abstracts of Papers*, p. 23.
- Majumdar, R.C. 1953. Growth of scientific spirit in Ancient India. *Sci. & Cult.*, Calcutta, **18** (10): 463-472.
- Mishra, B.B. 1968. Human anatomy according to *Agni Purana*. *Symposium on History of Sciences of India NISI*, New Delhi—*Abstract of Papers*, p. 62.
- Misra, S.S. and S.N. Pandeya 1963. History of Hindu medicine. *Bull. Nat. Inst. Sci. India*, New Delhi, **21**: 196-205.
- Mitra, J. 1968. Methodology for experimental research in Ancient India. *Symposium on History of Sciences of India NISI*, New Delhi, p. 55.
- Murthy, R.S.S. 1968. The *Brahmanas* of medicine and biological sciences. *Ibid*, p. 59.
- Rao, H S. 1957. History of our knowledge of the Indian fauna through the ages. *J. Bombay Nat. Hist. Soc.* **54** (2): 251-280.
- Raychaudhuri. S.P. 1963. Some aspects of Agricultural practices in India (3250 B.C.—800 A.D.). *Bull. Nat. Inst. Sci. India*, New Delhi, **21**: 107-117.
- Raja, C.K. 1962. *Survey of Sanskrit Literature*. Bharatiya Vidya Bhavan, Bombay.
- Rele, V.G. 1931. *The Vedic Gods as Figures of Biology*, Taraporevala, Bombay.
- Rensch, B. 1966. Problems of biological philosophy with regard to the philosophy of the *Upanishads*. *I.J.H.S.*, New Delhi, **1** (1) 75-81.
- Roy, M. 1963. Scientific information in the *Ramayana*. *Bull. Nat. Inst. Sci. India*, New Delhi, **21**: 58-66.
- Roy, M. 1967. Anatomy in the Vedic literature. *I.J.H.S.*, New Delhi, **2** (1): 35-46.
- Sastri, G. 1960. *A Concise History of Classical Sanskrit Literature*. Oxford University Press.

- Seal, B.N. 1902. *Positive Science of the Ancient Hindus*. New ed. (1958). Motilal Banarsai Das, Delhi.
- Sen, J. 1963. Some concepts of organic evolution of the Ancient Hindus. *Bull Nat. Inst. Sci. India*, New Delhi, 21: 184-188
- Shastri, V.R. 1963. Science in the *Vedas*. *Ibid*: 94-104.
- Storer, T.I. and R.L. Usinger, 1957. *General Zoology*. McGraw-Hill Book Co. Inc.
- Subbarayappa, B.V. 1966. The Indian doctrine of five elements *I.J.H.S.*, New Delhi, 1 (1). 60-70.
- Talukdar, S. 1963. The background of scientific development in India (a general review). *Bull. Nat. Inst. Sci. India*, New Delhi, 21: 48-57.

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Jesus Christ's Life in India

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Dr. Radhakrishnan, former President of India, in his book, "Eastern Religions and Western Thought" wrote, on page 165, "New Testament gives us the story of Jesus till the age of 13 and is silent about the next 17 years till his appearance at the place of preaching of John, the Baptist. Legends that he travelled in the East in the intervening period are sometimes mentioned for which there is no historical evidence." Two years back, the author brought to Dr. Radhakrishnan's notice certain books, published in the West, which gave details of Christ's travels and studies in India. They were obviously not available then and in his letter dated 25.2.1974, he sent "his good wishes" to the author for research in this direction. He expired subsequently a year later.

2. One such book, "The Mystical Life of Jesus" by H. Spencer Lewis, Ph. D., published by the Supreme Grand Lodge of Amore, San Josa, California, U.S.A., States :

(a) "The boy (Jesus) proceeded with a number of others who were going a short distance of the way, in caravan form, by the shortest route to Jagannath. The city was located on the east coast of India and its present day name is Puri. It has been the centre of Buddhism for centuries." This journey "took one year". (Page 180).

(b) Jesus studied at Puri for one year in the first instance and "became thoroughly familiar with teachings of Lamas whom he invited to Jerusalem" (P. 181)

(c) Jesus went to Ganges and stayed at Varanasi for several months and learnt the Hindu method of healing from Udraka, greatest Hindu healer. Jesus again came to Puri and studied religion and philosophy for two more years at Puri where he was also appointed as a teacher (P. 181)

(d) "Joseph received the sad news that His father in Galilee had passed on and His mother was grieving and none was able to comfort her. It was at this time that young Joseph expressed Himself for the first time in definite words, which were recorded, and are still preserved. He sent by Essene Messengers a letter to his mother saying "Beloved mother ! Be not grieved for all is well

for father as with you.....Try then to be content until I COME TO YOU SOON AND BRING TO YOU RICHER GIFTS THAN YOU HAVE SEEN, AND GREATER THAN THOSE MADE OF GOLD AND PRECIOUS STONES.....I am sure that my brothers will care for you and supply your needs and I am always with you in mind and spirit. YOUR SON: JOSEPH."

(e) The text of this letter from Jesus Christ written from Jagannath Puri to His mother and Galilee is of two pages and is printed on pages 184-85 of that book. The author later mentions that "after Joseph had completed the study of Buddhist teachings and Hindu doctrine in India, He journeyed to Lhasa in Tibet" and met the famous Buddhist Monk "Mengtse"

(f) The author has mentioned that Christ's letter at (d) and the above facts "have been carefully preserved and recorded." He has referred to specific documents to confirm all this archives some of which are archives of Rocirucian order, ancient records based on archives of ancient monasteries of Essene Brotherhood, "Essene records" (P. 178) "Scrolls had been found in caves1900 years, old record. These were hidden in caves for safe keeping by Essenes" (P.42), oath and pledge not to communicate and maintain secrecy (P. 27-28).

3. Similarly "Unknown Life of Jesus Christ" by Professor G. L. Christie of Paris University and V. R. Gandhi, published by Indo-American Book Company, Chicago U. S. A., states :

(a) One Russian "Notovitch" went to Laddakh and Tibet in 1890 and was surprised to see the mention of the name of Jesus amongst the Laamas there. On enquiry, he was shown some records and books giving details of Christ's religious study at the age of 20 at Tibet and his stay in India for 5 or 6 years. He brought photo copy of a few pages of those records of the ruling Himis dynasty which are reproduced in that book.

(b) Christ left for India after the age of about 13 in response to his intense desire to know more of Hindu spiritualism, religion and philosophy for which India was well known in those days and also to avoid his marriage (P. 64). He went to India with a merchant caravan through Sind (P. XVIII).

(c) He was so intelligent that he well learnt "Pali" (P. 70). He went to the Himalayas. Pages 58 to 98 of the book give detailed life of Christ in India.

(d) He studied in Jagannath Puri, a Buddhist Centre for 5

years This had a good collection of books. Christ also studied at Rajgir and Varanasi. He was well versed in Jain literature (Pages 111 and 112).

4. Another very important book, "Acquarian Gospel of Jesus, the Christ" by Levi, published by Devorrss and Co., Los Angels, U.S.A. has devoted no less than 15 Chapters (XXI-XXXV) to Christ's life in India and Tibet. He has narrated almost all the facts described in the preceding two paragraphs and has given their further details. Some new points from that book are :

(a) Jesus came to India with a royal prince of Orissa, Ravvanna who had gone to Palestine on some business.

(b) Jesus was highly praised by his Guru Barata Araba who taught him Vedas. Vidyapati, a sage and chief of the temple of Kapilvastu held Jesus in high esteem.

(c) Jesus attended the Council of Sages at Alexandria. This was also attended by some sages from India. Jesus greatly loved Vedic hymns and Avesta.

5. "The Bible in India, Hindu origin of Hebrew and Christian Revelation" by M. LOUIS JACOLLIOT also throws light on the subject. The well-known sage, Sadhu T. L. Vaswani, in the "East & West Series" No. 91 for January 1965, published by Mira Institute, Poona, mentions that Jesus came in contact with Indian Yogis, studied Buddhism and Vedanta. He also came to Puri, where, between the big temple the Sea there is a good garden stretched on in a quiet place and consecrated to Christ.

6. In addition to these, there are several authoritative publications of India which mention about Christ's coming to India (a) Bhavashya Maha Purana, an accepted book of ancient India, makes a mention that Jesus Christ, who was then known by some as Yus Yusuf, had discussions with Raja Shalivahan (b) During author's recent visit to Jagannath Puri, Sri Sada Shiva Ratna Sharma, President, Mukti Mandal, Puri, on 11.11.75. showed the author a Sanskrit centuries old manuscript "Sadhoo Tipni" on palm leaves, which stated that Christ (therein named as Christa) and his devotee Sadho Sundar Das used to live and study at a temple in Mohalla "Jai Tota" (Bara Santha) near Jagannath Temple. As this was also mentioned in the article of Sadhu Vaswani, the author with Sri Sharma visited the spot in november last. It was a ruin of old buildings. The tradition locally is that in the old days there was a big wood cross somewhere in that area. It has a big garden and some old coins were also found there. Some local Christians are of

the view that Christ used to stay, while at Puri, at a monastery over the ruins of which there is now a Chapel and "Sisters Oldorders Blessed Sacraments Convent School, Puri." A Spanish lady holds daily prayers there and it is also attended by local Hindus. (c) The Tibetan manuscript referred to in para 3 (a) perhaps still exists with Lamas and its photo copy is in the book, "Unknown Life of Jesus Christ."

7. Lord Jesus Christ is one of the greatest men of this world-loved and respected even by his opponents. He has the largest number of followers of any one religion. In spite of the adverse roll of "Churchianity" and unwanted conversions by empire builders for centuries together, his teachings are still the guide line for even non-Christians. It is therefore surprising why a long period of about 6 years which he spent in travels and studies in India has not come to public notice. The reasons are not far to seek. Firstly, the Government which was so cruel that it put him to death in a most shameful manner must have created terror in the public for any love or sympathy towards Jesus. This atmosphere continued for about a hundred years when there was a demand to know Christ's teachings. The four gospels were then brought out and approved as his teachings. Dodd Collens in his book, "The Founder of Christianity" says that Luke was written about 75 A.D., Mark 90 A.D., Mathew 95 A.D. and John A.D. Secondly, as the word Gospel itself denotes their narration is with a view to impart teachings and not to narrate history. Thirdly, as is well known, "Jesus did not leave any writing of his own, nor did any of his direct disciples write any of the gospels." Fourthly there was no paper or printing in those days and whatever writing on leaves etc was collected was safely placed in libraries. The biggest Library then was at Alexandria which, as is well known, was put to fire by Muslim Conquerers. Jacolit's book, referred to in para 5 clearly states that Christ's travels in India would have been well in public notice, had not the Alexandrian Library been burnt by the Turks. Every proof of his travels was available there.

8. Christ is a messenger of peace and the basic doctrine of Indian Culture is 'Shanti' (peace). Swami Vivekananda, as early as 1895, predicted "Europe is on the edge of a volcano. If the fire is not extinguished by a flood of spirituality, it will erupt." Dr. George World of the Harvard University, a Noble Prize Winner, declared at Ottawa on February 8, 1976 "I am afraid the world we know is doomed. It is difficult for many scientists to visualise how

human society will survive much past the year 2000, Left to myself, I would shut down all the nuclear power plants immediately because they are threatening further life on earth for tens of thousands of years to come." With all the material now forthcoming some of which is detailed above, it is high time that a regular research and study of Christ's life in India be taken up by some individual, institution or even Govt. and a monument at Puri is also desirable. This will be in the interest of world peace, spiritual wisdom and international integration. Besides the references in this article, the author is in the know of about a dozen other books which directly or indirectly throw light on Christ's Life in India, and these will be brought to the notice of such individual, institution or Government, when they contact him at Shanti Bhavan, New Model House, Lucknow.

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Salt Lake

Calcutta-64

On Svetasvatara Upanishad

(By Dr. Dayananda Bhargava, Head of The Sanskrit Department,
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The Svetasvatara Upanishad, belonging to the Taittiriya school of the Yajur Veda, has been named after the sage who taught it. Compare:

tapah-prabhavad deva-prasadac cha, brahma ha svetasvatara'-
tha vidvan¹

Max Muller says that it is the most difficult and at the same time the most interesting work of its kind. It is considered as an attempt to reconcile the different philosophical and religious views. It begins with an enquiry about the world in plainest possible language.² The Upanishad asserts that Brahman is the material as well as the efficient cause of the world. A spider, desirous of weaving a web, uses the silk which belongs to it and without which it cannot weave.³ Here the spider, as a conscious entity, is the efficient cause of the web and from the standpoint of the silk, the material cause. Similarly Brahman uses Maya as the material of creation, and this Maya also comes out of Brahman. Hence from the standpoint of Maya, Brahman is the material cause of the universe, but as pure consciousness, it is the efficient cause.

It is a strange phenomenon in this Upanishad that by the side of Super-personal Brahman exists the personal God, who is the Creator and ruler of this universe.⁴ This Upanishad does not lay emphasis on Brahman, the absolute, but on the personal God. The reason is that Vedanta believes in illusion and not in "Evolution". The complete perfection of Brahman does not admit of any change or evolution. So, if we see any change at all, it must be an illusion.⁵ To put it metaphorically, the world does not proceed from Brahman as a tree from a germ, but as a mirage from the rays of the sun. In fact, historically, the idea of Isvara came before the concept of Brahman and when the concept of Brahman came both the

1. VI. 21

2. I. I.

3. VI. 10.

4. III. 1.2.

5. Bhagavata I.I.I.

concepts had to be reconciled. The duty of creating the world was considered too low for Brahman and it was assigned to Isvara.¹ Yet, the two, the nirguna and saguna Brahman, are not different, and the same Brahman is described in two ways. Compare :

sa bhumim visvato vitva atyatisthad dasangulam.² It is important here, that Jivatirtha in his Nyayasudha contradicts Sankara and does not accept this two-fold division of Brahman. He remarks, "Brahmanah dvairupasya apramanikatvat". Anyhow, the power that enables Isvara to create the world is called Maya in this Upanishad.³ Pramada Dasa Mitra says, "Whilst we are subject to Maya, Maya is subject to Isvara. If we truly know Isvara, we know him as Brahman, if we truly know ourselves, we know ourselves as Brahman. This being so we must not be surprised if sometimes we find Isvara sharply distinguished from Brahman, whilst at other times Isvara and Brahman are interchanged."⁴ Sankara was very particular about this twofold division of Brahman. He says, "dvirupam hi brahmavagamyate namarupabhedopadhivisistam tadviparitam sarvopadhivarjitam."

Maya is the upadhi of saguna brahman. Compare :

Mayam tu prakrtim viddhi mayinam tu mahesvaram.⁵

Thus the prakrti of sankhya has been identified with the maya of the vedantists. The maya is the creation and the mayin the creator. This maya or nature or pradhana, however, is not an independent entity, but belongs to the Self of Divine (devatma Sakti).⁶ Thus the dualism of sankhya is overcome. On this very basis, Max Muller does not agree in assigning this upanishad a later date. He says that if it is proved that the upanishad belongs to sankhya system and not to vedanta, we may feel inclined to assign a later date to our Upanishad. What sankhya and vedanta mean is difficult to say, but it would be sufficient here to say that whatever else the sankhya may be, it is dualistic; whatever else the vedanta may be, it is monoistic. Hence Sankaracarya did not agree with Ramanuja who found ample authority for making the jiva and

1. Sacred Books of the East Vol. XV.

2. III. 14.

3. IV. 10.

4. J.R.A.S., 1878, p. 40.

5. IV. 10.

6. I.3.

prakrti eternal from the verse jnajnau dvavajavisanisavajahyeka¹. etc.

As regards the word Kapil², Sankara says 'kanakam Kapilvarnam...hiranyagarbham'. Vijnanatma also explains the word without any reference to Kapil, the sankhya teacher. Sankarananda says 'na tu sankhya praneta kapilah namamatrasamyen tadgrahane syad atiprasangah'. We cannot, however, deny the existence of Samkhya philosophy in this Upanishad. The trigunatmika prakriti is clearly mentioned in the famous verse 'ajamekam lohitasuklakrisnam³' etc.

The Upanishad dwells much upon the saguna brahma. It has been said that it is sectarian because while speaking of Highest Self it applies such name as Hara, Rudra, Siva etc.⁴ But this fact does not go to prove its modern character. How can we say that the idea of Highest Reality was developed first, and then it was lowered again by an identification with mythological and personal deities. It is just possible that the idea of one Supreme Reality must have been formed, when all the personal and mythological deities had been merged into one Lord. An ancient rishi can realise the truth that "what we have hitherto called Rudra, and what we worship as Siva, is in reality the Highest Self."⁵ And if we adopt this view then the upanishad would be considered in no way modern in character.

The upanishad fully realised the necessity of Truth and penance, 'satyena enam tapasa yo'nupasyati'.⁶ In the 2nd chapter the ethical preparation through Yoga is insisted. Self control is the very core of the practice of Yoga. Here self control should be distinguished from the practice of mortification and meaningless austerities. What is enjoined in the graphic delineation of Yoga-bhyasa is not the weakening of the mind and the senses through abstinence from the experience of sense objects, but the strengthening of the will power and the determinative faculty. The Yogi, in fact, develops a charming personality. Compare :

laghutvam arogyam alolupatvam
varna-prasadam svarasausthavam ca.

1. I.9.
2. V.2.
3. IV.5.
4. III. 2, I.10.
5. Sacred Books of the East, Vol. XV.
6. I.15.

gandhassubho mutra-purisaṃ alpam
yogapravṛttim prathamam vadanti.¹

But the realisation of Impersonal God through meditation is possible only for the highly qualified spiritual aspirant. As long as a man retains even a trace of his ego and regards himself as a psycho-physical being, conscious of his body and mind, it is proper for him to worship the personal God for protection, guidance and grace. It is only through the grace of God that the jiva realises the Brahman. Compare: 'tamakratum paśyati viśvaṃ soko dhatuḥ prasadanmahimāminamisaṃ'². The God is, no doubt, the ordainer of karma (karmadhyakṣa), but he is law as well as love. He is prayed for protection. He is the refuge of all being.⁴ He is the protector of the universe.⁵ Thus the synthetic way of this upanishad of reconciling the jñānayoga and bhaktiyoga, reminds us of a similar attempt in the Gita. Thus the teaching of this upanishad is essentially the same as that of other Upanisads. Mr. Gough remarks, "The Svetasvatara Upanishad teaches the unity of souls in the one and only Self, the unreality of the world as a series of figments of the Self feigning world fiction; and...the existence of the universal soul present in every individual soul, the deity that projects the world out of himself, that the migrating souls may find the recompense of their works in former lives."

Thus the Upanishad reaches the conclusion that the world is not the result of meaningless chance. Here it should be born in mind that the purpose of this cosmological discussion is not just to explain the universe of names and forms, but to establish through it the ultimate reality of Brahman. The knowledge of the world must lead to the knowledge of Brahman, otherwise it is useless. There is a purpose working behind the world. Matter cannot undergo any inner development without being acted upon by something above it. So they declare that 'devasya eṣa mahimā tu loke yenedaṃ bhramyate brahmācakram.'⁶ This Brahman is omniscient, omnipresent and omnipotent.⁷ The true nature of Brahman is hidden by the power

1. II. 13.
2. III. 20.
3. रुद्र यत्ते दक्षिणं मुखं तेन मां पाहि नित्यम् VI.21
4. सर्वस्य शरणं सुहृत् IV.15.
5. स एव काले भुवनस्य गोप्ता IV.15.
6. VI. I.
7. VI. II.

of maya. The realisation of Brahman destroys maya, as the light of sun destroys the gloom of night. Compare 'Jnatva devam mucayate sarvapasaiah'.¹

The Maya has also two aspects, the collective or cosmic aspect and the individual aspect. Both, Isvara and Jiva, are associated with maya; brahman associated with personal ignorance is called the jiva whereas the cosmic maya is regarded as the energy of power inherent in Isvara; and it is worshipped as Kali or Sakti in the popular Hindu Religion. The first creation of Isvara is hiranyagarbha—'hiranyagarbham janayamasa purvam'.² Thus we get three poises of reality—1. The absolute (Brahman), 2. The creative spirit (Isvara), 3. The world Spirit (Jiva).

The Upanishad claims again and again that one who realises Brahman becomes immortal—'ya etad viduramritaste behavanti'.³ We are afraid of death because we are afraid of the ceasation of our personality. If we realise the ultimate reality we find our own personality in the bosom of the eternal. To realise with the heart and mind the divine being who dwells within us is to be assured to everlasting life. The upanishad claims 'tamsanm varadam nicayyemam santimatyantameti'.⁴ Ravindara Nath has explained it in his own way. He says that when our self realising its true nature, is illuminated with the light of love, like a lamp revealing light which goes far beyond its material limits, proclaiming its kinship with the sun; then the negative aspect of its separateness with others is lost and then our relation with others is no longer of competitions and conflict but of sympathy and cooperation.

We would like to close this essay giving the last mantra of this upanishad, which reminds us that all this subject shines forth only to high souled one who have the highest devotion for God and for Guru :

"yasya deve para bhaktir yatha deve tatha gurau,
tasyaite kathita hyarthah, prakasante mahatmanah,
prakasante mahatmanah."⁵

1. I.8.

2. III.4.

3. IV. 17 and III. 10,

4. VI.23.

5. VI.23.

Atharva-Vedic Approach Towards Insanity (Unmad)

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Out of the different names of the Atharva Veda, two—Brahma Veda and Atma Veda—directly point towards its basic psychological nature, and the other three names Bhesaja Veda, Amrit Veda and Yatu Veda—point towards its therapeutic approach. According to Max Muller, "Brahma Means originally force, will, wish and the propulsive power of creation. Atma means breath or spirit or self, Brahma itself is but self." Satvalekar opines that the Atharva Veda is specially related to 'Atma' and 'Mana' and by this Veda we get knowledge of 'Atma' or self. Unlike the other three Vedas the subject matter of the Atharva Veda is 'Mana'. As the Ayurveda is the Upaveda of the Atharva Veda, the basic principles of the Ayurveda are also inherent in it. The practicality of the Atharva Veda for worldly achievements is wellknown. On the practical side, when there is any kind of cure of diseases, removal of calamities, or control of behaviour is to be done, Atharva Veda's approach is either purely psychogenic or psychosomatic but nowhere only materialistic.

Bhesaj (medicine) or therapeutics is one of the important subjects dealt by the Atharva Veda and its aim is to maintain human life beyond 100 years of age. Scattered all through the Atharva Veda are the descriptions of symptoms, diagnosis and therapy of all kinds of diseases of male, female, young and old. The Atharva Veda deals with a wide range of disorders such as somatogenic (both internal and external), and psychogenic, and also hereditary diseases. On the therapeutic side the Atharva Veda has made psychological, psychomatic and medicinal approaches for the cure of psychic and somatic disorders.

2. Concept of personality Deviancy in Atharva Veda : The

philosophic concept of the Atharva Veda about human personality is very well explained by Vedanta. But coming to the perceptual pragmatic personality it has physical and psychic sides. According to Atharva Veda Kand XVIII, Anuwak 4, Suktas 9 & 33, human personality on the physical side has three components as Vata, Pitta, and Kapha. These three components exist in every human body since birth, and varying in different degrees they maintain a certain equilibrium. So far this equilibrium is there it is physical normalcy. The psychic personality is constituted by three Gunas, or Vritties as Sattva, Rajas and Tamas according to Atharva Veda 1/1/1 and x/8/43. These three Vritties are in 'Manas' (psyche) since birth and varying in different degrees they keep certain equilibrium which is psychic normalcy. So normal personality on somatic side keeps equilibrium of Vata, Pitta and Kapha components and on the psychic side of Sattva, Rajas and Tamas Vritties. Thus normal personality is an equilibrated whole. The Sattva guna in itself is colourless, pure and static and it hardly gets corrupt. The Rajas guna is dynamic, expansive impulse having a tendency of eros, pleasure and enjoyment, while Tamas guna is dynamic destructive impulse having an evil and downward trend. These three psychic components give rise to three types of personality-Sattva, Rajas and Tamas. Rajas and Tamas components of psyche get Doshaj (pathological) when they increase or decrease in degree. Excessive indulgence in or lack of Rajas and Tamas Vritties are the abnormal phases of psychic behaviour. According to Atharva Veda VIII/2/1, 9, 12 corruptions or Doshaj of Rajas and Tamas give rise to psychic disorders hence these are required to be corrected. Personality variations occur according to the variations in the degree of combination of these three components. Normal psychological phenomena or gunas get abnormal deviating from the equilibrium. So personality deviancy is the disequilibrium of Sattva, Rajas and Tamas gunas of personality.

3. Symptomatology of Insanity (UNMAD) : Nosology as we find today in medical books is not given in the Atharva Veda. Disorders are given at different places in brief. Out of so many disorders of personality given in the Atharva Veda we shall discuss here insanity i.e. Unmad and that also of the psychogenic type only.

The description of Unmad (Insanity) is given in the Atharva

Veda at VI/III/1-4 and has been explained and commented by Whitney, Max Muller, R.G. Shastri, R.C. Sharma, S.D. Satavalekar, P. Arsh, N.J. Shende and Griffith. There are minor differences among the above writers on this Sukta e.g. Max Muller and Satavalekar have given its heading as "charms against mania", and "Mukti Ka Adhikari", while all others have given either "Unmad" or "Insanity" as its heading. The symptoms are talking incoherent and irrelevant; nonsense and violent so kept tied in chains; disturbed and unquiet; mind out of order and excited and crying loudly. Unmad is a very accurate synonym for the psychosis known as insanity or madness in the modern psychopathology.

4. Etiology of Insanity : There are two points for the etiology of insanity given in the above mantras (a) "Devansat" sin against gods and (b) "Rakshaspari" - influenced by a demon. These points require explanation and interpretation. It is universally known that the language of the Atharva Veda is symbolic and personificatory as is frequently expressed by Max Muller, Whitney, Karambelkar, Kapali Shastri, Aurobindo, Satavalekar, P. Arsh and others in their works. The words "sin or acting against gods", and "influenced by a demon" are vague and symbolic and their sense gets clear only when we give them a thought. In the phrase Devansat sin against gods; just mark that neither any particular act, nor any particular god is mentioned. The assertion is very vague and general. P. Arsh has given the correct explanation of this phrase which means living a life overthrowing the authority of gentle ideal, learned and honoured people—may be gods, parents, gurus, society, culture etc. and neglecting Sattva Vritti i.e. all the acts comprising goodness and misusing the five senses. Now if one goes to psychoanalysis and makes a search for some word for it, he finds the overthrowing of super ego a synonym of it. Super ego is the symbolic authority for all that gods, gurus, parents, gentlemen and goodness stand for. It is Sattvik. When the super ego is overthrown it is insanity. Brown explains the super ego in several phrases, as "chief force making socialization of individual"; "Sociologically and culturally conditioned"; "in practice it becomes almost synonymous with the idea of conscience", "super ego is normally superior", etc. In the phrase (b) Rakshaspari—influenced by a demon, the word demon is symbolically used for demonship and no definite demon is mentioned. P. Arsh has given with ample proofs the explanation of this phrase which means coming

under demonship and leading a demonic life accompanying characterologically defective and evil persons, suppressing Sattva Vritti and increasing Rajas and Tamas Vrittis. It is the other side of the first phrase. While (a) phrase means leaving virtues and goodness (b) phrase means getting evil and corruption. Satavalekar has also given similar thoughts. So psychogenic insanity is caused by hyper activity of Rajas and Tamas Vrittis and suppression of Sattva Vrittis. Thus it is a functional disorder. Coming to psycho-analysis one finds the word 'Id' quite synonymous of phrase (b). Brown has explained 'Id' as to be —“the reservoir of both life and death instincts, concerned purely with striving after pleasure and basic striving, has no idea of time nor of reality and full of loves, hates and uncivilities”. Freud says about 'Id', that it is “Instinctive, knows no values, no good and evil, no morality, energetic, no idea of outside reality and pleasure and pain principle.” So it is now clear that Rakshaspari phrase in this Sukta is synonym of fulfilling the needs of 'Id' in psycho-analysis.

It may now be summarised that the Atharva Veda has given two causes of psychogenic insanity (a) Devansat—sin against gods i.e. overthrowing the authority of the super ego, and (b) Rakshaspari-influenced by a demon i.e. coming under the influence of 'Id' and giving free scope to the fulfilment of its drives. Now compare the idea of the Atharva Veda with that of psycho-analysis. Brown, according to psycho-analysis, describes the psychotic insane personality as “the ego allies itself with the 'Id' and supports the demands of Id together with 'Id' denies reality. The 'Id' drives break through in a disguised but socially unacceptable form and super ego may disappear.” It is now clear that the Atharva Veda has expressed the same views regarding etiology of insanity as psycho-analysis has given in the 20th century.

5. Therapy of Insanity : Directly or indirectly the therapy for insanity in the Atharva Veda is given in VI/III. Various therapies have been given in the Atharva Veda according to the state and needs of the patient, facility of time and place and availability of sources. These therapies are : (A) Religious therapy, as Havan chikitsa, (B) Medicinal therapy, as Aushadh and herbal chikitsa, and (C) Psychotherapy as Divya and Manas chikitsa. Divya and Manas chikitsa further varieties, as (a) Adesh Direct suggestion, (b) Ritualistic therapy (Dramatic symbolic suggestion), (c) Utna Transference) and (d) Prayaschitta. Prayaschitta includes three

kinds as Swikarokti (Confession), Tap (Penance) and Balidan (Sacrifice). The therapist decides the appropriateness of application of some or one of these therapeutic devices for a particular patient. As is evident, some of these therapies have modern western therapeutic equivalents and some are new. So the therapeutic approach of the Atharva Veda for the cure of psychogenic insanity is rich and varied.

BIBLIOGRAPHY :

1. Shede N.J.,—The Religion and Philosophy of Atharva Veda—(Oriental Research Institute, Poona, 1952).
2. Karambelkar V.W.,—Atharva Veda and the Ayurveda—(Usha Karambelkar, Nagpur, 1961).
3. Brown J.F.,—Psychodynamics of Abnormal Behaviour—(McGraw Hill Col., Inc. London, 1940).
4. Arsh P.,—Atharva Vediya Chikitsa Shastra—(Arya Sarvedeshik Sabha, Delhi).
5. Karambelkar V.W.,—The Atharva Vedic Civilization—(Nagpur University Press, 1959).
6. Whitney W.D.,—Atharva Veda Samhita—(Motilal Banarsidass, Delhi, 62).
7. Max Muller, Sacred Books of the East, Vol. XI.II Hymns of Atharva Veda (Motilal Banarsidass, Delhi, 1964).
8. Shastri R.G.,—Vedon Me Ayurveda—(Ayurvedic Anusandhan Trust, Delhi, 1956).
9. Sharma R.C.,—Atharva Veda Samhita, Sayan Bhasya (Mathura).
10. Satavalekar S.D.,—Atharva Veda Ka Subodh Bhasya—(Swadhyaya Mandal, Pardi, Surat, 1958).
11. Griffith—The Hymns of Atharva Veda.
12. Freud S.,—New Introductory Lectures on Psycho-analysis (Hogarth Press Ltd., London, 1949).
13. Arsh P.,—Atharva Vediya Mantra Vidya—(Gurukula Kadgri Press, Haridwar Sam. 1999).
14. Singh, H.G.,—A Study of Indian Psychotherapeutic Practices (Agra University, Ph. D. Thesis 1970,)

Conception of the Soul in Sankhya Philosophy

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The central problems of philosophy, like the concept of the soul, are as debatable today as they were centuries ago. Unlike the objectively verifiable formulations of science, Philosophy is not above the private values, desires, aspirations and unconscious motives of the individual philosopher. The subject matter and reasoning employed are such that no generally accepted standard of proof can be applied to the problems of philosophy. The answer to all philosophical questions, whether negative or positive, would be greatly influenced by our private prejudices and outlook on life. The will to believe is common to all, but what we believe is determined largely by what we want to believe.

The doctrine of the soul in Indian Philosophy was the Atman of the Upanishadic sages. The soul in Sankhya Philosophy is not very different from the Upanishadic Atman. The soul, called purusha, in Sankhya Philosophy is independent of the material universe.¹ It is beginningless and eternally unchanging. Even the highest product of Prakriti, the mind has nothing in common with Purusha, which is timeless and spaceless, mere sentience and entirely passive. All the products of Prakriti are variously characterised by the three gunas; but Purusha is devoid of them.² It is the eternal seer behind the Phenomena of Prakriti and its changes. It is without parts and attributes, all-pervasive and subtle. The empirical "me" is not Purusha, it is of the essence of Prakriti. Positively Purusha is pure consciousness (cit). Our knowledge is composed of ideas and images—mental pictures. All mental pictures—ideas and images are the work of the three gunas. According to Sankhya philosophy the presence of the Purusha as a theoretically necessary principle may be safely inferred from the data of knowledge³. One can only wonder at this point if it is Kant or the Sankhya that is speaking.

1. A critical survey at Indian Philosophy. 150, C.D. Sharma.
2. Sankhya Pravachan Bhashyam I/141 Sutram.
3. Ibid 1/145 Sutram.

The Atman of Advaita Vedanta was said to be intelligence; consciousness, and bliss (Ananda); the Purusha except for the fact that it illuminates mental states, is neither pure intelligence nor bliss. Intelligence as a mental faculty, according to Sankhya, is the work of Prakriti and cannot have any relation whatever to the transcendental principle, Purusha. Rationality is in the empirical ego. Bliss cannot be the nature of Purusha. Pleasure and pain can be traced to the instincts, desires and cravings of the ego in the world of experience, but the Purusha as a detached spectator is not circumscribed by the limitations of the three gunas.⁴

The crucial point, that marks the difference between the Atman and Sankhya Purusha, is the doctrine of the plurality of souls. According to the Upanishads as well as the Vedanta, individual souls are only temporal and illusory forms of the cosmic soul. In the final analysis, individual souls are only appearances⁵. They derive their reality from Brahman. So Brahman is only real. Other souls are appearances of Brahman. In Sankhya, individual soul is an isolated principle, eternally real and ever the same reality, consequently, consists of an infinite number of Purushas. In Sankhya karika some arguments have been advanced to prove the existence of Purusha⁶. (i) The collocation of objects and their modifications must exist for the sake and benefit of a principle that is sentient. (ii) The subject or seer must be free from the perpetual modifications and movements of the physical manifold.⁷ All the presentations and changes are due to collocations of the three gunas, satva, rajas and tamas. The seer, therefore, must be free from the limitations of Prakriti and its gunas. The products of Prakriti can not be simple. The Purusha is simple and unchanging principle. So the actual seer is the Purusha which as an unfailing light illuminates the mind. (iii) There must be a supreme background without which it would be impossible to coordinate all experiences. In spite of reality of multiplicity in mental life, there must be a transcendental and unitary principle—the Purusha. The desire to escape the impermanence and futility of existence is the heart around which the body of Sankhya Philosophy, as well as the other systems of Hindu Philosophy is built. Cravings for emancipation is interpreted by the Sankhya Philosophers as due to the demand of the Purusha to seek release from the meshes of Prakriti. The striving

4. Sankhya Karika—19.

5. Brahma Sutra Shankara Bhashya 1/1/5, 1/2/6, 1/2/20.

6. Sankhya Karika 17.

7. Sarvadarshana Sangraha, 320 Abhayankar Sartri edited.

for freedom from the limitations of existence paints to one that longs for and can effect the release.⁸ This is the Purusha.

Sankhya adheres uncompromisingly to the doctrine of the plurality of Purushas. The monistic philosophers assert that individual souls are illusory and that only the world-soul is real. Sankhya does not accept this monistic theory of the soul. Sankhya gives following arguments for proving the plurality of the Purushas:⁹ (i) The souls have different sensory and motor organs and undergo separate births and deaths. Had there been only one Purusha, the birth or death of one should have meant the birth or death of all and any particular experience of pleasure, pain or indifference by one should have been equally shared by all. Hence the souls must be many. (ii) If the soul were one, bondage of one should have meant bondage of all and liberation of one should have meant liberation of all. The activity of one should have made all persons active and the sleep of one should have lulled into sleep all other persons. (iii) Though the emancipated souls are all alike and differ only in number as they are all beyond the three gunas, yet the bound souls relatively differ in qualities also, since in some sattva predominates, while in others rajas, and in still others tamas. Hence their difference¹⁰.

There is a kind of relationship, best expressed as that of reflection, between the Purusha and each individual buddhi. If the purusha did not reflect the light of consciousness in buddhi, there would be no "I" feeling. This relationship is important if we are to understand the arguments for the existence of innumerable souls. The Atma and Matter are perfectly heterogeneous things. The Matter, according to Sankhya, is active but unspiritual. The Atma is knowing but impotent and powerless. Still the entire course of the world depends on the cooperation of both. How can the unspiritual Matter work aimfully with a fixed plan for the Atma? How can the inactive Atma take part in this working?

The Sankhya thinkers offered a solution in the form of the metaphor: The Atma and the Matter resemble like a lame man and a blind one respectively. Apart, isolated from each other they cannot achieve anything; The lame man cannot move; the blind man cannot direct his activity aimfully. But the blind man takes the lame one on his shoulders and both come to their goal in happy

8. Sankhya Pravachan Bhashyam 1/144 Sutram.

9. Sankhya Sutra 1/149.

10. A critical survey of Indian Philosophy 157. C.D. Sharma.

cooperation. Similarly the inactive soul and the unspiritual matter unite themselves for the joint work and thus reach their goal¹¹. Pan-chashikhacharya again explains this relation between the Atma and the Matter. He placed the soul and the Matter opposite to each other as man and wife and derived their heterogeneity out of their oppositeness. The matter is like the mother and is therefore a perpetually bearing (birth giving) and creative principle. The Atma is the Man—the husband ; his character is, therefore, to view, to consider and to know. The word prakriti, for the matter, was known to be feminine and could be understood as the female producer. The word Atma was replaced in Sankhya by the word Purusha—the man. Thus the knowing principle is the Purusha and the creative principle is Prakriti. With it is established a connection with the last end of development¹².

Like the magnet moves the iron with its attraction, so the proximity of Purusha excites Prakriti and guides evolution. But the Prakriti is also characterized by the counter movement of decay or dissolution—the backward movement to reach the original equilibrium of the three gunas. Dissolution, in short, is not a state of emancipation but only one of temporary quiescence. The striving of the Purushas to seek release exerts after a time magnetic influence on Prakriti, thereby upsets its equilibrium, and starts it anew on the course of evolution. This alternation of evolution and dissolution, both determined by the transcendental influence of the Purushas, will continue until all the Purushas find emancipation from the clutches of Prakriti.

While the relation between Prakriti and Purushas is indirect and cosmological, that between buddhi and purusha is more direct and psychological.

The Sankhya, unlike the Vedanta, is keenly aware of the differences of the individual organisms. The various organisms in the world are neither morally, physically, nor intellectually alike. These differences would indicate that their experience and perception of the outer world are different. The presiding consciousness, which is due to the reflection of the Purusha, must therefore be different for different *buddhis*.

According to Sankhya, Prakriti is metaphysically as real and

11. Sankhya Karika 21

12. History of Indian philosophy Vol I 249 FRAUWALLNER

eternal as the Purusha. Although the Purusha is not an active agent, but is the remote knower of the drama of life. If the world and the ego, that is, life, are unreal, then what guarantee is there that Purusha, also, is not unreal? Just as there has been a conjunction between an individual *buddhi* and Purusha, there will be a disjunction of the two. But it must be clearly understood that while the conjunction lasts, the *buddhi* is real and there is no illusoriness about its transformations. As long as Prakriti was not the MAYA of the Vedantins, Sankhya-philosophers could not escape the doctrine of the plurality of Purushas.

Certain arguments are given against the assumption of one cosmic soul. If this were so, how should we be able to account for the multiplicity of *buddhis*, which with their individual experiences and cognition, would be difficult of explanation? We should have one *buddhi* instead of many. But this is obviously not the case. According to the Sankhya-view Prakriti exists for the emancipation of Purushas. If it is a fact that there is only one Purusha, then Prakriti would not be working for the emancipation of Purusha but only for the ego which, although real, is only a temporal unity. If the Prakriti leads to the emancipation of only the ego, then its role and function as the emancipator of Purusha would have to be abandoned. If it is maintained on the other hand that the Purusha and not the ego is liberated, then with the emancipation of one, all would be finally released, for there is only one cosmic Purusha¹³.

Prakriti seems to have a direction towards which it is evolving. There is no chaos in nature if we look at it in perspective. It is blind in its activities, following the law of cause and effect even in the minute transformations of simple collocations. There is no place for a "miracle" in nature. While we do not see teleology in isolated parts of nature, Sankhya claims that the evolution of Prakriti is, when nature is taken as a whole, adopted certain spiritual objectives. Although eternal, Prakriti plays a secondary role. Its reason for existence is its serviceability to Purusha. The teleology, consequently, has its origin not within itself but in the nature of the Purushas—their demand for emancipation.

Once we begin to think of the cosmic process in its totality and the reason for its evolution as well as dissolution, the explanation for which modern science does not offer, it is legitimate to seek

13. Sankhya pravachan Bhashya 1/154 Sutram.

an answer outside the physical universe. Bergson traces it to an ELAN-VITAL, Sankhya calls in the aid of Purushas whose necessity for experience and subsequent demand for liberation from the web of Prakriti account for the teleology, evolution, and dissolution in nature. Several analogies are used to explain how the non-conscious Prakriti can be utilized for the service of Purusha.¹

Among western philosophers, one might find a similarity between Aristotle's God or Prime Mover and the Sankhya conception of the Purusha. Neither Aristotle's Prime Mover nor purusha is available for religious purposes. They are devoid of those qualities which make a spiritual principle the object of religious dependence. Purusha's transcendental presence, without in any way affecting or being affected by the transformations of the world, predisposes Prakriti to work for its emancipation. It is the metaphysical necessity for a comprehensive understanding of existence that made both Aristotle and Sankhya introduce a non-material transcendental principle—Prime Mover and Purusha.

Concluding remarks : According to Sankhya, Purusha is defined as pure spirit (cit). It is non-matter. It is without attributes, without qualities. Consciousness is not attribute of Purusha, consciousness is essence or nature of Purusha. Purusha is without parts, without motion, imperishable, inactive and impassive²; it is unaffected by pains and pleasures, devoid of feelings and emotions, completely indifferent to sensations. It abides outside the categories of the world. Purusha is comparable to a seer when he is seeing nothing, or to a mirror in which nothing is reflected³. Numerically purushas are different, essentially alike. Sankhya believes in qualitative monism and quantitative pluralism. These Purushas are not themselves active; they only contemplate, as spectators. Their mere presence is what excites Prakriti to move—as a magnet excites iron.

Some reference in details :

- (2) त्रिगुणादि विपर्ययात् प्रथम अध्याय १४१ सूत्र अहं सुखी दुःखी मूढ इत्यादि प्रत्ययास्तु न पुरुषे सुखादि साधकाः, तत्स्वामित्वेनाप्युपपत्तेः..... सांख्यप्रवचन भाष्य उपर्युक्त सूत्र ।
- (3) जड़प्रकाशायोगात् प्रकाशः प्र० अ० १४५ सूत्र, लोके जड़स्याप्रकाशस्य

1. Sankhya Pravachan Bhashya 2/1 Sutram

2. Sankhya Sutra 1/163

3. Philosophies of India—329, H. ZIMMER

लोष्ठादेः प्रकाशोत्पत्त्यदर्शनेन तदयोगात्... प्रकाशस्वरूप एव पुरुषः...।
सांख्यप्रवचन भाष्य उक्त सूत्र ।

- (4) तस्माच्च विपर्ययात् सिद्ध साक्षित्वमस्य पुरुषस्य ।
कैवल्यं माध्यस्थ्यं द्रष्टृत्वमकतृ भावश्च ॥ सांख्यकारिका १६
- (6) संघातपरार्थत्वात् त्रिगुणादि विपर्ययादधिष्ठानात् ।
पुरुषोऽस्ति भोक्तृभावात् कैवल्यार्थं प्रवृत्तेश्च ॥ सांख्य कारिका १७
- (8) कैवल्यार्थं प्रवृत्तेश्च प्र० अ० १४४, शरीरादिकमेव चेद्भोक्तास्यात् तदा
भोक्तुः कैवल्यार्थं दुःखात्यन्तोच्छेदार्थं कस्यापि प्रवृत्तिनोपपद्येन । सांख्य-
प्रवचन भाष्य उक्तसूत्र ।
- (9) जन्मादि व्यवस्थातः पुरुषबहुत्वम् प्र० अ० १४६, पुण्यवान् स्वर्गं जायते,
पापी नरकेऽज्ञो बध्यते, ज्ञानी मुच्यते, इत्यादेः ...पुरुषा बहव इत्यर्थः ।
सांख्य प्रवचन भाष्य उक्तसूत्र ।
- (11) पुरुषस्य दर्शनार्थं कैवल्यार्थं तथा प्रधानस्य ।
पञ्च वन्धवदुभयोरपि संयोगरतः कृतः सर्गः ॥ सांख्य कारिका २
- (13) नाद्वैतश्रुति विरोधो जातिपरत्वात् । सांख्य सूत्र प्र० अ० १५४
- (14) विमुक्तमोक्षार्थं स्वार्थं वा प्रधानस्य । सांख्य सूत्र २ अ० १ सू०
- (15) औदासीन्यं चेति । सांख्य सूत्र प्र० अ० १६३ सू०

The Ramayana in Indian Literature

By Dr. Ganga Ram Garg,

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The first epic poetry in any literature of the world, the Ramayana is evidently a unified literary product, largely the creation of one single poet, Valmiki. From the numerous references to the Ramayana and its author in the Mahabharata as also in its supplementary portion, Harivamsa, it appears that Ramayana existed before the Mahabharata. But while the celebrated grammarian, Panini, alludes to Vasudeva, Arjun and Yudhishtira, he makes no reference about Rama. In any case, the Ramayana is universally acknowledged as first poem (adi-kavya) and its author as the first poet (Adi-kavi). The Ramayana is comparatively free from religion and mythology, philosophy and dharmaśāstra, history and ethnology. The sanctity attached to it is due to the inherent quality of its hero and heroine, who in their deified character have ever represented the idea of Indian conjugal love and faithfulness. This is in sharp contrast to its sister epic, Mahabharata, where its sacred character is largely due to the large didactic sections it contains.

When Rama was deified as an incarnation of Vishnu and the cult of Rama came into vogue, devotees after devotees paid their obeisance to their lord by composing Ramayanas. The result is that there are numerous popular versions of the Ramayana in every Indian language and so much sanctity is attached to the Ramayana that it has come to be termed as scripture. But the Ramayana is something more than the scripture. Rama's conquest of the region to the south of the Vindhya and upto the southernmost limit, Lanka, is considered the expansion of Aryan culture to the South. It is for this reason that the Ramayana is considered as a national epic.

The Rama theme had become so popular even as early as 2,000 years before, that Vimala, a Jain writer, made Ramayana, the vehicle of the preaching of Jain doctrine. The work, which is in Prakrit and which the author named "Paumachariya," is the earliest specimen of the Jain version of the Ramayana. But Vimala

has given other details which are instrumental in understanding the basic Rama legend, which has been worked out by different authors in different ways. Here, Ravana has not been shown as a monster, nor Hanuman a monkey, but they are Vidyadharas, a class of semidivine beings. Vimala's religious sermons have a lofty didactic tone; and he tells many an episode of romantic and legendary interest. His gathas and elegant metres, testify to his poetic ability and his style is almost uniformly fluent and forceful. The dialect also is interesting because of the age of the work and the Apabhramsa traces seen in it. Another great author of the Jain version of the Ramayana is Swayambhu, who composed his Paumaehariu in the 8th century in Apabhramsa. The work was left incomplete but was completed by the poet's worthy son, Tribhuvana Swayambhu. Consisting of 90 Sandhis, arranged in 5 cantos, the total number of Kadavakas is about 1,3,000 which is calculated to be equal to 12,000 Slokas. The poem is full of descriptions of both the persons and objects which in themselves are matchless.

The credit of having the first version of Ramayana (as also of the Mahabharata) in any modern Indian language goes to Kannada, where Ponna (950 A.D.), another Jain poet, composed his Ramakatha, a secular epic, based on the Ramayana story. The poem is, however, no longer extant. Thereafter the earliest Jain version of the Ramayana in Kannada is by Nagachandra (1100 A.D.), who named it Ramachandra-charita-purana, popularly known as the Pampa Ramayana. Though the main thread of the narrative coincides with that of the Valmiki Ramayana, there is a very wide difference in details, with a slant towards emphasising the Jain atmosphere. There have been several subsequent attempts to render the Ramayana into Kannada, but Nagachandra's version still retains its uniqueness. It got the author the title "abhidava Pampa."

The first Telugu version of the Ramayana is attributed to Errapragade (14th cent.), one of the three great early Telugu poets, but unfortunately the work has not been traced. The earliest Ramayana in Telugu is generally known as Ranganatha Ramayana (1250). The story of Rama seems to be more popular in Telugu region than anywhere else. There are at least a hundred poems and a large number of prose works relating to the story of Rama. Even today, there are several poets who are engaged in composing lengthy poems relating to the Ramayana. Close upon the heels of the Ranganatha

Ramayana is Bhaskara Ramayana, a version mainly for the educated ones. The Ramayana, which has found favour with the layman is, however, by Kumari Molla, the earliest Telugu poetess, who was the daughter of a potter. Composed in the abridged form, it is noted for its felicity of narrative skill.

In Tamil, the most popular Ramayana is by Kamban (12th cent.) who was a renowned scholar. In the introductory stanzas, the author mentions that his epic is based on the three Rama stories in Sanskrit, but he follows Valmiki Ramayana more closely. Except in the last book, where he describes the war between Rama and Ravana with freedom, he has simply accepted Valmiki's division of the epic into books and cantos.

In Malayalam, the earliest metrical work is Ramacharitam, which is based on the story of the Yuddhakanda of Ramayana and is believed to have been written by an ancient ruler of Travancore. The work, dated between the 10th and 13th centuries, shows signs of a strong Tamil influence in respect of words and metres. Another work, showing the same Tamil influence is Ramakatha Pattu, composed by Ayyipillai Asan in the 13th cent. About the 14th cent. Kannassa Panikkar and Rama Panikkar produced two versions of the Ramayana. They are Tamil Malayalam compositions. The earliest Ramayana Champu (in mixed Sanskrit and Malayalam metres) is by a well known poet, Punam, whose no other work is extant. Apart from minor variations, the version follows the Ramayana original.

In the languages of Eastern India, the Ramayana came to be rendered from the 14th century when the stupendous task of translating the Ramayana was undertaken at the instance of the king of Kachhari. The first and the last books are, however, missing which were supplemented in the 15th cent. by Madhavadeva and Sankaradeva, two eminent poets, respectively. The translation is remarkable for its constant fidelity to the original and is rendered with wonderful force and brevity. In Bengali, Krittavasa Ojha (c. 1399) was the foremost poet who wrote on the theme of the Ramayana. His version (c. 1420) became very popular all over Bengal; its language and its contents were altered by a series of unknown copyists, the last of them being Jayagopala Tarkalankar. In Krittivasa's Ramayana, in place of the human and heroic Rama of the original epic, there is a gentle and compassionate incarnation of the divinity to whom the living faith of a simple people would easily go. The

tradition of telling the Ramayana in Bengali continued into the 19th cent. In Oriya, the rendering of the Ramayana was made by Balarama Dasa in 1500 A.D. with matter incorporated from various Pauranic sources. Balarama Dasa was a towering figure whose influence has been lasting throughout Orissa. His version of the Ramayana is universally popular.

In Marathi, Sridhara was the first poet who adapted the Ramayana under the title of Rama Vijaya. Most of the Marathi speakers, particularly the unlettered receive the knowledge of this Sanskrit epic from his Rama Vijaya. The style of Sridhara is simple and direct. In Gujarati, the earliest poet, who extensively borrowed from the Ramayana, was Premananda, who flourished in 17th cent. Many of his works are adaptations of the episodes from the the Ramayana a supreme master of the art of narrative poetry. Premananda was the greatest poet of the century.

In Punjabi, the earliest poem on an episode of the Ramayana is Lav Kusa Dila Pauria, describing the battle between Rama's army and his sons Lava and Kusa. The poem, composed by Jasoda Nandan (c. 1650) contains 88 stanzas. No great Panjabi poet has rendered Ramayana into Panjabi, but there are numerous versions of the Ramayana transcribed into Gurukukhi character, which are popularly regarded as Panjabi. In Sindhi, there is no direct version adapted from the original Sanskrit version, but Tulasidasa's Hindi Ramayana (Ramacharitamansa) was translated into Sindhi prose by Vasumal Jeramdas. The full Ramayana and a section of it were staged in 1898 and 1897 respectively. In Kashmiri, the Ramayana is known as the Ramavatara-charita, with a sequel Lava-Kusa-Yuduha-Charita. Written about 1760, by Prakasa Rama, this work has been edited in Roman transliteration with an English summary by Sir George A'sham Grierson, and published from Asiatic Society of Calcutta in 1930, but it was first published from Srinagar in Persian characters in 1910. The work consists of 1786 stanzas, some in the two line accented metre of Kashmiri. In Urdu, there are several versions of the Ramayana available in Persian script. In English, the Ramayana was translated in 1900 by Romesh Chunder Dutt, an eminent scholar and administrator, who had earlier translated the Mahabharata. Available in Everyman's Library, the work is always convincing.

In Hindi, though the Valmiki's Ramayana has been translated

into prose and there are several popular versions available including the one published by the Gita Press, the popularity of the Ramayana is mainly due to Hindi's greatest poet, Tulasidasa. Tulasidasa's Ramacharitamansa has such a universal appeal that it has taken the place of scripture. In many of the Hindu homes, it is recited daily and is even worshipped. The impact of Tulasidasa's Ramayana on the minds of the generations of Hindus is tremendous. It has given stimulus to the composing of other Ramayanas as also numerous works based on the episodes of the epic. Even in the modern times two eminent poets Ayodhya Singh Upadhyaya Hariadth and Maithili Saran Gupta have treated of Rama themes in their immortal works, Vaidehi Vanavasa and Saketa.

In almost every city and even in towns and villages, full Ramayana is staged. Perhaps there is no other work, which has captured the heart and mind of Indians so much as the Ramayana. Even now a days modern writers borrow their plots from the Ramayana. This tradition would continue down to the ages to come as it has come to stay from the earliest times. The impact of the Ramayana on the cultural unity of India is permanent and everlasting. But the theme of the Ramayana has not confined itself within the geographical limits of India. Recently there was a Ramayana festival held in Java in which apart from India, delegates from Burma, Ceylon, Thailand, Malaysia, Indonesia and Combodia staged their own versions of the Ramayana. Thus the Ramayana represents the cultural unity of Greater India also.

The last Phase of Buddhism in North-Eastern India

By Dr. Upendra Thakur.

The Chinese accounts make it clear that though Jainism had lost its force in North-eastern India, Bhuddhism was a dominant religious force. During the time of Fahien's and Yuan Chwang's visit, there were large numbers of viharas, remains of Ambapli's garden, Bhiksus and other places of Buddhist importance, though most of them were now in a dilapidated condition and almost in ruins. Later the Buddhists, like the Jainas, seem to have migrated to south Bihar where the universities of Nalanda, Vikramasila, Odantapura and Vajrasana attracted thousands of pupils to their fold. Moreover, the emergence of Brahmanism in full swing by this time demoralised them to the extent that they found a safe place in their sanctuaries to escape the Brahmanic onslaughts. Thus, from the sixth century A.D. we find that the influence and popularity of Buddhism in North Bihar was almost gone, and it was from Magadha, their stronghold, that they directed their attacks against the Brahmanic logic and thought.

Notwithstanding this total decline in the fortunes of Buddhism in the region north of the Ganga, it must be said that their contributions to the rise, growth and tremendous development of Indian logic and philosophy in the following centuries and earlier have been most significant. Their contributions to ancient language and literature, art, paintings, architecture and sculpture and finally to the growth of democracy have been equally brilliant¹, which may yet be seen all over the country.

The story of the last phase of Buddhism is quite interesting. The incorporation of the Buddha into the cosmopolitan and ever-expanding Brahmanic pantheon² as one of the ten incarnations in

1. For details see Satkari Mookerjee's articles in *JBRS* (Buddha Jayanti Special Issue, Vol. I), 1956, pp. 159-72 : A.S. Altekar's papers, *Ibid.*, pp. 113-27; Vol. II, pp. 333-41.

2. *JBRS*. (Buddha Jayanti Special Issue Vol. I), 1956, pp. 33-34.

which Lord Visnu comes down on earth at different times, by the orthodox Brahmanas, who were at one time the severest critics of the Buddha and his new Order finally put a finis to the long, long story of the bitter wordy duel and violent wranglings between the adherents of the two opposite schools of thought. The *Varahupurana* (Chap. 47) says that as a result of the observance of the vow of *Buddhavadasi*, king Suddhodana had as his son Lord Visnu in the form of the Buddha.¹ Similar festivals in honour of other incarnations of Visnu to be performed in different months of the year are also described. But, it is not known when and where they were or are in vogue. As a matter of fact, Buddhism, in its essence was not hostile to Brahmanism and, therefore, it is not surprising to find that the Buddha later came to be worshipped as an incarnation by the followers of the Brahmanic faith.

Thus a revaluation of the testimony of foreign scholars, inscriptions and contemporary digests makes it clear that with the advent of the thirteenth century A.D., Buddhism was but the last flicker of the lamp, and its old moorings were gone. The Buddhists tried to cope with the changing times and successfully brought in a reformation. Mahayana Buddhism was now replaced by Tantric Buddhism and Sahajiya Buddhism. Tantric Buddhism, led to further decline and fall of Buddhism in India. And, the process of this disintegration could not be checked inspite of strenuous efforts of Acharya Atisha of the Vikramasila University, who expelled the Tantric teachers like Natekana and Vajrapani from the monastery of Vikramasila in order to maintain the purity of Mahayana Buddhism².

The birth of Sahajiya Buddhism was indeed an expression of revolt against ritualism and formalism and an aversion to scholarship. The leaders of this new sect within the Buddhist fold further attempted to accomodate the lower classes of the community who had by now been completely cut off from this order. On the basis of the songs in the *Charyapadas*, regarded as the earliest

1. Also see Hemadri's *Chaturvarga chintamani* (third quarter of the thirteenth century), *Vratakhanda*, Bib. Indica Series, No. 1, pp. 1037-88; Laksmidhara's *Krityakalpauru* (second quarter of the twelfth century A.D.). Gaekwad Oriental Series, pp. 331-32. The *Buddhavadasi* falls on the twelfth day of the bright half of the month of *Sravana*.
2. For details see, B.P. Majumdar's paper in *JBRS* (Buddha Jayanti special Issue, Vol. I), pp. 180-82.

form of the Bengali and Maithili literatures, it can safely be presumed that the Sahajiyas had successfully communicated their thoughts to the intelligentsia of the time. The introduction of Sahajiya Buddhism and the recognition of the Buddha by the Brahmana legists clearly suggests the revival of Buddhism in Bihar, Bengal and Uttara Pradesh during the early mediaeval period and after.

A perusal of the literary works of the twelfth century convinces the readers that Buddhism by this time was not disparaged by the Brahmana community and the followers of Brahmanism, barring a few exceptions. Sriharsa and Laksmidhara assign an honourable place to the Buddha in the Brahmanical pantheon. In the *Naishadhacaritam*¹ the Buddha is regarded as an incarnation of Visnu. Laksmidhara in his *Krityakalpataru*² prescribes that the Buddha is to be worshipped on two occasions: (i) on the first of *Chaitra* and the seventh of *Vaisakha*—both time along with other deities. We have further details to be performed on these occasions. Moreover, the Buddha had long been recognised as an *avatara* of Visnu in the *Mastya*³, *Bhagavata*⁴, *Garuda*⁵, *Linga Puranas*⁶ etc. besides the *Varaha Purana* quoted above.

Coming to North Bihar, we find that Buddhism continued there in some form or other till thirteenth century A.D. Dharmasvami worshipped an image of Tara in Vaisali⁷ a famous Buddhist deity. A work called *Vajravali* opens with an invocation to God of thunderbolt. It gives details of a rite called *Vajravatara*.⁸ Tara, Marichi and others are also armed with Vajra. That Tara became a famous Buddhist deity is evidenced by a painting of the twelfth century A.D. We find among the inscribed miniature paintings of the two palm-leaf mss. mention of "the Tara of Vaisali in

1. Ed. Handiqui, Canto, xxi, 88; Cf. *Sunyamavada*, *Vijnanasamastya* and *Sakaratasiddhi* in X, 87 and Tara in xxii, 136.
2. *Krityakalpataru*, vol. iii (*Niyatakalakanda*), Gaekwad Oriental Series, vol. cxi, p.388.
3. 47,247. 285-7.
4. I,3; II, 7,37; VI. 8,19.
5. I. 202.
6. II. 48, 31-32 etc., R.C. Hazra, *Studies in Puranic Record*, p. 41.
7. *Biography of Dharmasvamin*, p.42.
8. *ASB-MSS* No. G-3855.

Tirabhukti".¹ In this connection the Buddha-image in Vaisali is remarkable as he is seated in the Vajrasana pose.²

It is true that Buddhism, as a religion, had almost declined in this region, but Buddha, the new avatara, continued to be worshipped as one of the members of the Brahmanical pantheon. Chandessvara the versatile scholar-Prime minister of Harisimhadeva of the Karnata dynasty of Mithila³, has in the *Krityaratnakara* prescribed that the Buddha was to be worshipped on the first day of the bright fortnight of *Chaitra* (*tamase Buddhaya chaiva namah prakritaye tatha*⁴). Again, the Buddha was to be worshipped along with the river Ganga⁵ on the seventh day of the bright fortnight of the month of Vaisakha. His image was to be erected on that day and then the festivity was to be held consecutively for three days. Dramas were to be staged, dances to be performed and monks to be fed and given books and dress. On these occasions, alms and clothes were to be distributed to the poorer section of the society.

Further, according to Chandessvara, the exclusive worship of the Buddha was prescribed on the twelfth day of the month of Sravana.⁶ A golden image of the Buddha was to be worshipped on that day and the golden image was to be given away to a Brahmana after due worship and ritual. The Buddha was neither born, nor recieved enlightenment nor *Parinirvana* on any of these dates, but it is well known that the full moon day of the month of Vaisakha is connected with all the three above mentioned events in his life.⁷

But, it seems that all was not well with a section of the Brahmana scholars who still struck a discordant note contrary to the general accomodating spirit of the age. Jyotirisvara in his *Varnana-Ratnakara* (A.D. 1324) denounces Buddhism as "degraded and dangerous" (*bauddha paksa-aisana apatabhisana...*)⁸ which shows that a section of the Maithilas had not yet reconciled to the fast

1. *ARASI.*, 1903-04, p. 82.

2. *Ibid.* pp. 216 ff; also Cf. *JASB*, VI. pp. 128-38 (extracted from the Journal of Mr. J. Stephenson).

3. *HM*, Chap. v.

4. *Krityaratnakara*, Bibl. Indica Series, p.105.

5. *Ibid.*, p. 160.

6. *Krityaratnakara*, Bibl. Indica Series, p. 247.

7. For details, see B.P. Majumdar, *op. cit.*, pp. 161-15.

8. *VR*, p. 39.

changing times¹. From all available accounts, however, it is clear beyond doubt that except a few the majority of the people had accepted the Buddha as the tenth avatara of the Hindu pantheon, and worshipped him accordingly.

From the account of the Sufi saints of Bihar given by S.H. Askari² in a series of articles, it appears that strangely enough the Sufis also chose these very places as their seats which had been in the preceding centuries the strongholds of Buddhism. Sufis of all orders like Chistia, Suhrwardia, Qadria, Firdausia, Madaria and Shuttaria contributed to the Islamic outlook and mitigated the rigours of the caste system and it is but natural that the Sufis should have found a congenial soil for the inculcation of their religion and faith in these areas. The most celebrated Sufi saint was Hazrat Sharfuddin Ahmad Maneri (661 A.N.-782 A.H.). In North Bihar, Sheikh Fattu, Sheikh Burhan and Ismail spread the Islamic religion, and at or near Hajipur lived Syed Muhammed, Syed Ahmad (who died as martyr at Jaruha), Abul Fatch Hidayatullah (at Tankol), Mir Ibrahim Chisti; at Basarh, Sheikh Qazin Shuttari; at Muzaffarpur, Abdur Rahman of Sargyaganj; at Tajpur (Purnea), Sheikh Husain Dhukkurhposh; at Samastipur, Shah Tajuddin and in Darbhanga, Sheikh Shamsuddin Saman Madari, Pir Shah Nazir and Sheikh Tajuddin Madari. Similarly in South Bihar there were hosts of Sufi saints preaching Sufism and Islam.

CONCLUSION :

From the above facts we infer certain irresistible conclusions. The teachings of the Buddha went against the grain of Hindu psychology and as such could not take an abiding root in India. Hinduism was based on *Shabdapramana* (the *Vedas*) whereas the Buddha repudiated all authority and traditions. The Hindus were metaphysical while the Buddhists showed indifference towards it. The existence or non-existence of God did not at all interest Buddha as, according to him, man was the architect of his own future. Naturally, therefore, there is no place for ritualism in Buddhism. Moreover, he did not succeed in compelling his hearers or followers

1. For other details see *HM*, p. 374.

2. *JBRS*, 1951 (March-June) : *Historical Miscellany*, published by the Patna College Archaeological and Historical Society, pp. 46-70.

to adopt an attitude of suspended judgment on the ultimate question. His conception of Dharma was not sufficiently concrete for practical purposes. The result was obvious. The Buddha gradually came to be deified and Buddhism was very much influenced by the Hindu thought. On the other hand, Buddhism too exercised a great, almost overwhelming influence on Hinduism. It gave birth to neo-Hinduism which absorbed the best elements of Buddhism. It was the result of this influence that the Shaivas borrowed the monistic and contemplative elements of Mahayana Buddhism; the Vaishnavas borrowed devotional and humanitarian elements; the Vairagis replaced philanthropic Mahayana Shramanas and the Buddha was given a place in the Hindu pantheon as the tenth avatar¹.

There is no doubt that Mahayana was built on wholesale borrowing from Hinduism, and this process of intermingling went on and on until in the sixth century A.D. Buddhism was borrowing even from Shaktism, the most esoteric form of Hinduism. It ultimately gave rise to Tantricism and Vajrayana with the result that the feminine divinities now found their way into Buddhist pantheon. Prajnaparamita was the personification of the qualities of the Bodhisattva. The theme, being like the Hindu view that the God might best be approached through Goddess, was like the Shakti of the Hindu pantheon. It was thought in sexual unions, and the Sexual symbolisms were introduced combined with a new magical mysticism.² It could best be attained by acquiring magical power, *Vajra* (thunderbolt) and as such this third school (eighth century A.D.) came to be known as the Vajrayana in Eastern India and grew rapidly in Bihar and Bengal. The chief divinities were now Tara, Matangi Pishaci, Yogini and Dakinis. This new school was responsible for the presentation of the Buddha in ferocious poses. It was this form of Buddhism modified by primitive local cults and practices which was firmly established in Tibet as a result of missions sent from the great Vajrayana monastery of Vikramasila,³ and which dominates the Buddhist art of the period and after.

1. R.K. Choudhary, *Bihar : The Homeland of Buddhism*, pp. 85-86.

2. *Ibid.*, p. 126.

3. For other details, see *Ibid.*, pp. 125-27.

The Sahajiya sect of Bengal and Bihar classed as Vaisnavas also originated from the decadent Buddhism of later times. A good number of works were composed in Bengali on this cult. The process of assimilation began when in about the sixth century A D., *Shunyavada*, the highest doctrine of Buddhist philosophy of the Madhyamika school, was accepted as the sole truth in the *Yogavashistha Ramayana* which attempted at bringing about a harmony between this doctrine and the theme of the Gita. In the eighth century, Acharya *Gaudapada* of Bengal affiliated the said doctrine to the Vedanta which ultimately became the theme of the *Brahmasutras*, at the hands of his grand disciple, shamkara and finally attained a predominant position in the Indian philosophical thought¹. It is, therefore sometimes argued that shamkara drove away Buddhism out of India. He represents the complete synthesis of Brahmanical and Buddhist streams of thought, and his concept of *Brahma* is nothing but-Shunyavada. In his *Dasavatara Stotram* he described the Buddha as the prince among the Yagis who dwelt in the centre of his heart. He was, therefore, called a *pracchanna Bauddha*. The acceptance of his view by Vachaspati, the celebrated Maithila thinker (vide-his *Bhamati*) was ultimately responsible for the worship of the Buddha as the tenth avatara in Mithila proper, though the conflict of economic interest perhaps, for the time being, reinforced the hostility of the Mimamsaka Brahmanas towards the Buddhist monks.² But then, it was a passing phase for we know that a commentary on the original *Yogavashistha*, namely *Vivartavada* alias *Mayavada* was also written by Anandabodhendra Bhattaraka of the Shamkara school, several centuries after Shamkara himself, in order to propagate this pseudo-Buddhistic faith³. According to R.C. Temple, "Do we not see here the ideas that led to the latter day Parameshvara, the supreme of the Hinduism? Indeed, there is very much of Hinduism in the Adi Buddha who is the *Svayambhu* or self-being; in *Avalokitesvara*, the Redeemer; in *Manjusri* the Helper, and the Bodhisattvas generally, who are now fully developed. In fact, the rise of Yogachara school explores the tenets of Samkhyas, Vai-

1. H. Vedantasastry in *JBRs*, (Buddha Jayanti Special Issue, Vol. I 1956, pp. 73-74.

2. R.K. Choudhary, *op. cit.*, p. 87.

3. H. Vedantasastry, *op. cit.*, p. 75.

sesikas, Pashupatas and other philosophical schools and religious denominations of Brahmana origin."¹

With the emergence of Vaisnavism in a new form in the twelfth and thirteenth centuries Buddha was taken as an *avatara*, entirely different from the *Bhagavata* by Jayadeva in Bengal and others in Mithilā.

The age-old Buddhist hostility to the caste-rigidity was continued in neo-Vaishnavism which accepted caste-system, as a mere social institution, without any bearing on religion and the creed of non-violence preached by Buddhism was accepted by Vaisnavism.

The Sahajiya sect still flourishes in many places, for instance in Bengal. Though inclined towards Vaishnavism it has really deduced itself from the old *Sahajasiddhi* of Tantric Buddhism and till now in their esoteric Sadhana they use Buddhistic terminology².

The image of the Buddha is worshiped here and there in Bengal and Mithila and other places, somewhere as Vishnu, somewhere as Shiva and somewhere as some Goddess. The worship of some gods and goddesses, the images of which are but images of Buddha, is even now in charge of lower class people such as Domas, Namahshudras etc., which is certainly reminiscent of Buddhist practices.³

Dharma is one of the three *ratnas* of Buddhism and the worship of Dharma or Dharmaraja is very popular with a section of the Brahmanas as well as the masses, especially of the lower classes in Mithila and Bengal.⁴

Thus, before the dawn of the thirteenth century Buddhism lost its entity as an independent faith and Vaishnavism finally incorporated the faith of the Buddha into the parent stock. The process was accelerated by the rising tide of Muslim invasion which swept over Bengal and Bihar and gave a shattering blow to the last vestige of Buddhism. The process that had begun in the sixth century A.D. took final shape in the closing part of the twelfth century

1. Quoted, R.K. Choudhary, *op. cit.*, p. 87.

2. H. Vedantasastry, *op. cit.*, p. 75.

3. *Ibid.*

4. H. Vedantasastry, *op. cit.*, p. 75.

when Buddha was accepted as an avatara by the Brahmanas including the Maithilas all over the country, and running through different phases over a period of four hundred years, Buddhism became fully incorporated into the body of Hinduism in the later part of the sixteenth century, mainly through the medium of neo-vaishnavism.

Thus died Buddhism in Mithila, Bengal and elsewhere, but death concerns the body, and not the soul. And, in this case also we find that Buddhism is still living, though in a different garb. A close study on comparative basis would show that Buddhism has been incorporated into the body of Hinduism and the former still lives in the cults of the Vaishnavas, the Sahajiyas, the Shaivas, the Bauls, the Dervishes, the Sufis, the Sannyasis¹ and also in Tantricism and Advaitavedanta.

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1. Even now in village Nahara Bhagavatipura, near village Koilakh in Madhubani sub-division, there is a Durga-temple in which stray finds of Buddhist sculptures are collected. There is no image of Durga in the said temple, and only the Buddhist images are worshipped. There are many Sannyasis there, who now from a caste and trace their origin from their Buddhist ancestors. A coin of Vigrahapala III was also discovered there which is now in possession of Prof. Tantranath Jha of C.M. College, Darbhanga, who kindly gave me this information,

Thoreau's Yoga (Asceticism)

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Thoreau observed in one place : "I know of no more encouraging fact than the unquestionable ability of man to elevate his life by a conscious endeavour", and Salt adds thereto : "His religious and moral creed was founded on a fixed optimistic conviction that nature is working to some wise and benevolent end..."¹ Or, to quote from Thoreau's own "Natural History of Massachusetts": "The spruce, the hemlock, and the pine will not countenance despair... The practical faith of all men belies the preacher's consolations."² Of course, Thoreau was an unconventional man in point of faith. Conscience and reason alone guided him. He was an ascetic who wished to lead a meaningful life and who attached least importance to the external glammers of the world. He very much wanted to understand his own nature, his relationship with Nature, Man and the Universe. In the *Bhagavad-Gita* he found clues for a life of quietude and these he entered into his own writings. Thus, in his *Journal* he wrote : "The man who having abandoned all lusts of the flesh, walketh without inordinate desires, unassuming, and free from pride, obtaineth happiness". Again, "The wiseman seeketh for that which is homogeneous to his own nature".

Thoreau's reading of holy Hindu books led him to become a *Yogi*. In his view, the *Yogi* is as free in this world as the birds in the air. Those who practise *Yoga* gather in *Brahman*. In *Walden* Thoreau describes a state of mind that has a close resemblance to experience of a *Yogi*. It is almost identical to the transcendental self of the *Upanishadas*, in which we find the *sakshi* or spectator who merely looks on without participating in the affairs of the world.

In the chapter "Sound" of *Walden*, there is a delightful picture of Thoreau at rest sitting in the sunny doorway of his cabin

1. Salt, *The life of Henry David Thoreau*, rev. ed. (London 1896), p. 222.
2. *Writings*, v. 105,

from sunrise to noon, in reverie and solitude. Here he says, "I realized what the Orientals mean by contemplation, where the divine absorbs the human." It is a truth that the Orient became an integral part of Thoreau's life, thought, and expression. It enhanced his knowledge of understanding the mysterious creation of the world. It enriched and complemented his natural tendencies and convictions. Thoreau valued most "the calm of mind, all passion spent." He appreciated the sense of resignation in Hindu thinkers. The resignation with which he accepted the approach of death actually sprang from his feeling that it was "a release of the vital force, a return to nature."³ Like Emerson, he was influenced by Hindu doctrines of the life after death.

It is almost indisputable that Thoreau's emphasis on the value of meditation was definitely intensified by his Oriental reading. Meditation appealed to him because its practice demanded solitude and because it is ideally coupled with the contemplation of Nature. To both of these Thoreau was already addicted.

Occasional tantalizing hints scattered here and there in Thoreau's works have led some scholars to suspect that he had dallied with the Oriental-concept of the transmigration of the soul. When talking of natural objects, Thoreau had a fondness for quoting or alluding to Oriental writers. The famous 'pine tree' sentence was excised by Lowell from the ending of "Chesuncook" before he printed it in the *Atlantic*, probably because its assumption of sentient life and a possible continuing existence in a mere tree seemed to him sheer nonsense⁴. No doubt, nowhere in his works Thoreau explicitly expressed any outright acceptance of the doctrine of transmigration. But he did show an unmistakable fondness for the code of conduct contained in *the Laws of Manu*.

Though it would not be proper to think of Thoreau's years at Walden as a spiritual retreat akin to a *Yogi's* complete abstraction from all worldly objects, yet the fact remains that Thoreau did think of himself as a *Yogi*, and more than once affirmed it.

3. Arthur Christy, *The Orient in American Transcendentalism*, p. 214.

4. From an early conversation with Thoreau, Hawthorne gathered that "Thoreau prided himself on coming nearer the heart of a pine-tree than any other human being." W.D. Howells, *Literary Friends and acquaintance* (New York, 1900). p. 54.

If it is true that Reality is *Brahman*—or the Over-Soul—and the phenomenal world is a lie, then the logical end of life for one who believes this is to seek devotedly that Reality. Not the apparent actualities of the world, but its potentialities would be his interest. His sole spiritual vocation would consist in the discovery of God, not in what serves his temporal ends. Salvation would not be a question of accepting a creed, but of acquiring insight. This is the case of Thoreau, the seeker after the Reality.

Thoreau differed from Emerson in that the latter was urban and social, with a dash of worldliness about him. Emerson's urbanity forbade him to retire from the world in order to clear the channels leading to the Over-Soul of all obstructions. Thoreau, however, succeeded in this to some extent. And yet, he never thought of the simplicity of his manner of living as a virtue in itself. It was for him a path leading towards spiritual self-knowledge and realisation. He was also in favour of practising austerities. On September, 1841, he noted down that "One may discover the root of a Hindoo religion in his own private history, when, in the silent intervals of the day or the night, he does sometimes inflict on himself austerities with a stern satisfaction."⁵ The practice of austerities, he believed, was to establish a nexus with God.

Moncure Conway knew well both Thoreau and the Hindus. He wrote specifically of Thoreau at Walden in the following manner :

Like the pious Yogi, so long motionless whilst gazing on the sun that knotty plants encircled his neck and the cast snake-skin his loins, and the birds built their nests on his shoulders, this poet and naturalist, by equal consecration, became a part of the field and forest⁵.

Mr. Conway's observation about Thoreau is largely correct and carries good weight.

If a true estimate of Thoreau's ascetic practice is ever to be obtained, it will be found in his *Walden*. Of his purpose in going over to the Walden hermitage Thoreau writes : "My purpose in

5, *Journal*, 1,279.

6. Moncure Conway, *Emerson at Home and Abroad* (Boston : Osgood 1882), p. 280 ; Quoted by Arthur Christy: *op. cit.*, p. 202, note reference, p. 358.

going to Walden Pond was not to live cheaply nor to live dearly there, but to transact some *private business* with the fewest obstacles."⁷ These are not the words of a love-lord or economically embarrassed man. These are rather the words of a *Yogi*, who spent his time as given below :

Sometimes, in a summer morning, having taken my accustomed bath, I sat in my sunny doorway from sunrise till noon, rapt in reverie,...in undisturbed solitude and stillness, while the birds sang around or flitted noiseless through the house, until...I was reminded of the lapse of time. I grew in those seasons like corn in the night, and they were far better than the work of the hands would have been. They were not time subtracted from my life, but so much over and above my usual allowance. I realized what the Orientals mean by contemplation and the forsaking of works⁸.

Not only in the matter of meditation, but also in that of diet, Thoreau compared his own with that of the Hindu.

Thoreau cherished a kinship with trees, and established his brotherhood with every living object, his identification of personal life with universal life. It surely cannot be proved that he was so Hindu as to desire the total eclipse of his own ego by absorption into *Brahman* yet he wrote lines suggestive of this very thing :

Fain would I stretch me by the highway-side
To thaw and trickle with the melting snow ;
That mingled, soul and body, with the tide,
I too may through the pores of nature flow⁹.

Perhaps here is something of an impersonal attitude towards death and immortality so conspicuous a feature in Hinduism (also in Buddhism).

Finally, Thoreau has stated the definite results obtained from the Walden experiments. He assuredly felt that the complex and enslaving system of economics which his neighbours and most of the world thought inevitable and even excellent was nothing but death to the spirit. Yet it is a partiality to construe the following

7, *Writings*, 11, 21.

8. *Ibid.*, II, 123-4.

9. *Writings*, v, 409.

10. *Ibid.*, II, 356.

passage as an expression of happy escape from economic and social ills. It is only in the light of idealistic philosophy that it can be fully understood :

I learned this, at least, by my experiment : that if one advances confidently in the direction of his dreams, and endeavours to live the life which he has imagined, he will meet with a success unexpected in common hours. He will put some-things behind, will pass an invisible boundary ; new, univer-sal and more liberal laws will begin to establish themselves around and within him ;...and he will live with the licence of a higher order of beings. In proportion as he simplifies his life, the laws of the universe will appear less complex, and solitude will not be solitude, nor poverty poverty, nor weak-ness weakness¹⁰.

There is a Hindu flavour in these words. An Indian *Yogi* may not speak of advancing confidently in the direction of his dreams and with determination living the life he has imagined. Nevertheless, there can be no denial that the conclusions which Thoreau reached at *Walden* are the same as the teachings of Emerson's "Brahma". Poverty, solitude and weakness are things other than themselves in the same sense as in Emerson's poem the doubter is the doubt and the slayer is the slain. This is essential Vedantic teaching. And when Welden gave Thoreau these significant results, it is niggardly to deny him the name of *Yogi*. But he was a New England *Yogi*, who was conditioned by his nativity and his moral and religious traditions. Like a Hindu sage, he courted solitude for the purpose of spiritual discipline, but he worked for men with a most Christian spirit. Even if his renunciations did not bring him to sack-cloth and a seat in ashes, they included everything that did not concern his spiritual life. And though he makes ideas positive creative forms, which is not the habit of the Hindu *Yogi*, yet there seems little doubt, had he been born among the forest-seers who wrote the *Upanishads*, he "would have felt neither consternation nor any want."¹¹

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11. Arthur Christy, *op. cit.*, p. 207.

Identification of Bahasatimitra with Pushyamitra Shunga

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The accession of Pushyamitra to power after the murder of Brihadrath, may be placed in 187 B.C. Prof. Jagannath¹ places the murder of the last Maurya king in 14 B.C. though Dr. R.K. Mookerji² favoures 187 B.C. Placing Chandragupta Maurya's accession in 324 B.C., we find no ground for questioning the date of 187 B.C.

Pushyamitra has been shown to be a synonym of Bahasatimitra or Bahaspati of the Kharvela inscription³. Dr. Jayaswal says that Kharvela, king of Kalinga attacked Magadh and defeated its king Bahasatimitra, who is identified with Pushyamitra. But this identification based on a statement in Hathigumpha inscription is most unconvincing. Mr. R.P. Chanda, and Mr. Allen point out that the reading of Bahasatimitra is impossible. According to Mr. Allan, the word in question begins with 'bahu', the certain elements in it seem to be bahu (su) idita. It is very probable that it may not be a proper name at all, for the suggested reading of the preceding words as Magadham cha rajanam is extremely improbable, philologically as well as palaeographically.

The equation Pushya-Brihaspati is ridiculous. The logic behind this equation is that Brihaspati is the regent of the Nakshatra Pusya. But this association of Brihaspati with Pusya cannot be a safe ground for the identification of the defeated ruler of Magada with the performer of the two horse sacrifices. According to the established principles of astrology⁴ Pushyamitra cannot be a Jupiterian. Here mind rises over the matter and compassion is the result. To be filled with the influences of Jupiter is to know the value of mercy and to taste the divine. The true religious spirit comes from Jupiter. In every day Astrology, Mr. V.A.K. Ayer⁵ remarks, "Jupiter is the greatest benefic, everything good, generous, idealistic and of an expansive nature goes with him." Persons born in Pusya Naksatra are good natured, learned, popular and righteous. Shil Ponde⁶ says that they are religious and always try to

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help others. Such qualities are not found in Pushyamitra Sunga, who killed his master Brihadrath, the last Maurya King. In Vim-sotari table the lord of Pusya is Saturn while in Ashtotari table the lord of Pusya is Sun. The first letter of the name Pushyamitra indicates that his Nakshatra is Hasta. In every day Astrology the qualities of Hasta are mentioned thus:—"Learned, courageous, enthusiastic, grateful, wealthy towards the latter part of life, merciless, potential thief." The qualities of Hasta, can be very well seen in the life of Pushyamitra Sunga. Under these circumstances we can safely say that equation Pusya=Brihasphti is based on very flimsy grounds.

The palaeography of the Hathigumpha inscription is an evidence pointing to its late character. "A number of letters with thick headed vertical or serif Ka with the lower part of the vertical prolonged, invariably round ga, cha of the butterfly type with two loops and ta having in most cases rounded lower part help us in determining the approximate age of this record".

According to R.P. Chanda⁸ the reading Bahasatimitra is doubtful for 'h' has an 'u' stroke below and the next letter is indistinct. But, even if the reading is provisionally accepted, it is difficult to endorse the identification of Bahasatimitra with Pushyamitra. Mr. Jayaswal⁹ first identifies Bahasatimitra, Raja of Magadh, who fell at the feet of Kharvela with the Raja Gopaliputra Bahasatimitra mentioned in the Pabhosa inscription No. 1 and with Bahasatimitra of the copper coins found at Kosam near Pabhosa and also at Ramnagar in Rohilkhand. The Pabhosa inscription records the excavation of a cave by Asadhsena, maternal uncle of Raja Bahasatimitra in the 10th year of Udaka. As the inscription is dated in the reign of Udaka, it is rightly assumed that he held imperial position. But it is not quite correct to say that no testimony is specified for Raja Bahasatimitra. As already pointed out by Rapson¹⁰, the way in which Bahastimitra's name is mentioned in the beginning of the inscription, clearly indicates that Pabhosa was included in his dominion and he was the reigning Raja at the time of the inscription. So Raja Bahasatimitra of the Pabhosa inscription No. 1, cannot be identified with a predecessor of Udaka on the imperial throne. Dr. Jayaswal also identifies Agnimitra of the copper coins so far found at Ramnagar and at certain other sites in Rohilkhand with the Sunga king Agnimitra, son and successor of

Pushyamitra, but no notice is taken of the weighty arguments adduced by numismatists against this identification. No coin of Agnimitra or Bahasatimitra has yet been found either in Magadh or eastern Malwa. So it is premature to conclude that coins of Agnimitra found in Rohilkhand only and the coins of Bahasatimitra found at Kosam were issued by kings bearing same names who ruled from Pataliputra and Vidisa. Even if this is conceded, the next difficulty is the want of definite proof that Bahasatimitra was the immediate predecessor of Agnimitra. Dr. Jayaswal¹¹ in this connection writes. "The i stroke in the legend of Agnimitra is wavy and curved, which is a sure sign of lateness, while in that of Bahasati, it agrees with the older style to which Cunningham missed it and read the legend as Bahasatimitra. My friend Mr. Bhandarker has detected another index. He kindly writes to me that the ta is also later in Agnimitra's coins."

Any difference in the form of character used in the coin legends of father and the son should rather be considered as tests of contemporary varieties, than only positive evidence of priority and posteriority. Dr. Jayaswal remarked that Agnimitra survived the death of Pushyamitra and ruled for eight years only. So practically they were contemporaries. The hook shaped sign of media i found in the legends of Panchala coins of Agnimitra, Bhanumitra, Bhumi-mitra and Phalgunimitra, is a decorative feature and cannot be recognised as a test of age. The form of medial i used in the coins of Bahasatimitra is the usual one found in the inscriptions of the Kushanas and the Guptas. The ha and sa, in the legend of the coins of Bahasatimitra, have perfectly equalized vertical lines and the sa is of the same type as the sa in the inscription of the Mahaksatrap Sodasa. On palaeographic grounds therefore Bahasatimitra of the Kosam coins should be assigned to the end of first century B.C. and not to the first half of the second century B.C.

Another argument used by Dr. Jayaswal in support of his identification of Bahasatimitra with Pushyamitra is that both Brihaspati and Pusya are according to Sanskrit usage identical. Pusya is the name of the sixth lunar asterism and Brihaspati is the planet Jupiter. I have already given reasons that this identification is not correct. Mr. Chanda observes that denotation of the same god by the terms Skanda and Kumara does not justify the identification of Skandgupta with Kumargupta. According to Mr. R.P. Chanda, the Hathigumpha inscription is later in date not only than

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Asoka's edicts and the Besnagar Garuda Pillar inscriptions but is posterior to the Bharhut Torana inscription and the Nanaghat inscription of the Andhra King Shri Satakarni I.

Analysing the evidence furnished by the coins as noted above, there is hardly any ground for the identification of Bahasatimitra with Pushyamitra, because the former belonged to that group of rulers which included Agnimitra whose coins have also been found. According to Mr. Allan¹², the coins of Brihaspatimitra II, Agnimitra and Jyesthamitra form the next group and are closely connected. He has further pointed out that Brighaspatimitra evidently of this group is mentioned in the Hathigumpha inscription, while the epigraphy of the Pabhosa inscription agrees well with that of Brahmaspatimitra II's coins. It is clear that the person issuing coins was different from the one defeated by Kharvela and it is certain that the latter cannot be identified with Pushyamitra.

Dr. R.C. Majumdar¹³ however points out that of the six letters of the Hathigumpha inscription which have been read Bahasatimitra, the second letter seems to have a clear U sign attached to it and the third and fourth letters look like pa and sa. "In this connection we should note that the Divyavadana distinguishes between a king named "Vrihaspati and king Pushyamitra and represents Pataliputra as the residence of the latter whereas the Magadhan antagonist of Kharvela is possibly called Rajagahanapa and apparently resided in the city of Rajagriha."¹⁴

REFERENCES

1. Comprehensive History of India, P. 95.
2. The Age of Imperial Unity, P. 97.
3. K.P. Jayaswal, JBORS, Part IV, Dec. 1917, pp. 470-80.
4. Allan Leo. Practical Astrology, P. 10.
5. Every day Astrology, P. 15.
6. Hindu Astrology, P. 10.
7. B. N. Puri, India in the time of Patanjali, P. 35.
8. IHQ, Vol. V, No. 4. Dec. 1929.
9. JBORS, Vol. III, 1917, pp. 473-479.
10. CHI, Vol. I, P. 525.
11. JBORS, Vol. III, 1917, P. 477.
12. Catalogue of coins, Ancient India, P. XCVI
13. IA, 1919, p. 189.
14. PHAI, P. 311.

Book Review

STUDIES IN INDOLOGY : By Dr. Satya Kam Varma;
Published by : Bharatiya Prakashan, N. Delhi; pp. 336 :
price: Rs. 70.00; 1976.

It is really a rare phenomenon to find such a treasure-house of different branches of Indology compressed in one single volume. The present work, coming from the pen of such a prolific and established writer as Dr. S. K. Varma, comprises apparently of three sections: **Vedic** ; **Sanskrit**: language and grammar; and **Miscellaneous** and contains nineteen papers in all, But these nineteen papers cover as wide and divergent a range of subjects as **Vedic Philosophy**; **Vedic grammar**; **Sanskrit Language**; **Sanskrit Grammar**, **Indian Linguistics**; **Panini**, **Sakatayana and Bhartrihari**; **Yoga**, **Indian Epigraphy**; **Indian Medical Philosophy**; and **Manuscriptology**. While some of these papers were originally presented before the learned national and international assemblies some of the them have been written particularly for this collection. A few of the papers are brief representatives of the author's well-known masterpieces, originally published in Hindi. Each and every paper is equipped with copious and comprehensive foot-notes, given at the end of each paper.

Apart from this, this work has a comprehensive *Bibliography*, a copious *Index*, detailed *Contents*, and a *Diacritical Code*, to help the readers. There is also an 'Errata' extending upto four pages, which in any way does not lessen the importance of the present work.

The importance of this work does not lie in the long list of the disciplines or of the subjects and topics covered in the different papers, as it lies in the freshness of the author's approach in almost every field. He has not tried to limit his scholarship in producing only the opinions of other scholars, expressed so far. He has gone directly to the source and has come out with some quite unorthodox conclusions. This approach has made his papers easily readable. Even the copious quotations or footnotes do not obstruct the

smooth presentation and understanding of the subject. Thus, the papers have gone beyond the limits of mere research papers and have entered the arena of imaginative creative writing as well.

To witness the freshness of such imaginative approach, we would better analyse some of its aspects :

The Vedic section comprises of four papers in all. The first two relate to *Vedic Theism* from different perspectives. In the first paper, the author has tried to re-explain the approach of 'Nirukta' of Yaska, with a bit of variation; though coming to the same inevitable conclusion regarding the unity of the supreme self. He has divided the Cosmic gods in two ways: *Earthly-Spatial-Heavenly* as well as *Material-Divine-Spiritual*. According to him *History, Metaphysics* and *Cosmology* all have played their part in the evolution of Vedic Theism, the central and most crucial idea of which is "due to its various aspects and manifestations the same Supreme Divine Power is imagined and adored in various ways and forms." While elaborating the Giant-God phenomenon of 'Purusa-Sukta' in the second paper from the cosmological point of view, author comes to the inevitable conclusion: "let there be howsoever primitive supposition regarding the Divine Supreme, Vedic Seer will turn it into a finest philosophical imagery with his 'golden vision', leading ultimately to the Vedic Monotheism."

In the third paper, he deals with Vedic sociology. According to him, "Vedic society was in no way different from any modern society, as far as the social virtues and vices are concerned. But it was totally different in its reactions and responses towards the contemporary social problems. It was here that it proved to be a maturer society than even that of today." And is it not a mockery that still our scholars are advancing the arguments to prove that the Indian society was merely a tribal one even during the times of *Mahabharata* (Dr. N. R. Ray and others)

The fourth paper belongs to be 'Importance of Pratisakhya,' which shows the richness and refinement of the Vedic grammar and its techniques.

In the Second Section, there are eleven papers in all, as many as six of them belonging to the different aspects of study of Bhartrihari and his immortal masterpiece 'VAKYAPADIYA', of which Dr. S. K. Varma is undoubtedly a master-spokesman. He has already

produced a vast and most valuable literature in Hindi, regarding the aforesaid. According to him "*Bhartrihari was a great linguist, in its most modern sense of today.*" One only needs to go through these articles to verify this fact.

Two of the remaining articles of this section deal with the "*Phonetic Arrangement*" and the "*Technical Technology*" of the all-time great master-grammarian PANINI. Both stand as a witness to the scientificity of Panini's approach. A separate paper elaborates some linguistic theories of the great pre-Paninian grammarian Sakatayana, who was equally popular with his contemporary Etymologists, Grammarians, Vedicists, and linguists.

The first paper of this section becomes most important, though it is the briefest one because it sees SANSKRIT as a 'living tradition'. The constantly changing face of a language itself stands testimony to its 'livingness'. And if Sanskrit has come off through so many ages and the resultant changes, how it can be called as a 'dead languages' then ?

As a 'side-issue' these papers try to convince us on the basis of circumstantial evidence, that our Indian history does not start from such a recent period as is being made out today. Imagine if Panini comes at the end of a long tradition of grammarians and himself lives in the vicinity of 830 B.C., while coming after a long gap from the Vedic times and having a huge collection of literature before him created during the intervening period, then how to fix the date of Vedas? Yaska flourished at least in 900 B.C. Then how to place Sakatayana, Pratisakhya, and the rest? Are we sure that Mohen-Jo-Daro was in no way post-Vedic; particularly when seeing through the eyes of Yaska, who tells us about at least two levels of generations having passed before even the start of the Vedic Etymological studies, which came to him in the form of a tradition? All this is highly thought-provoking.

In the Third Section, there are four papers in all : one dealing with the problem of the Puryamitras, as arising out of an Epigraph; another dealing with Manuscriptology; yet another with the physiological interpretation of Astanga Yoga and Hatha Yoga, which according to the author is as simple as 'to develop voluntary control even over the involuntary nervous system'; and the last dealing with the Indian Medical philosophy, whose crucial dictum is: "*Individual is only a micro-representative of the Universe.*"

Get up and binding being the finest, it would have been still better if the printer would have been more careful regarding the ink-impressions and proof-corrections. Still publishers deserve all the encouragement for bringing out such an important work. We can only hope that the author will come out soon with his promised future works, undaunted by any detractors.

Kalidasa Bibliography: Dr. S.P. Narang; Heritage Publications, N. Delhi; 1976; pp. 450; Rs. 100.00.

It was with the publication of the great and immortal works like '*VEDIC BIBLIOGRAPHY*' of Prof. R.N. Dandekar and '*NEW CATALOGUS CATALOGORUM*' of Prof. V. Raghavan that a new era started in the Indian Indological researches. For the first time such vast informative works were produced by the Indian scholars of eminence and these were rightly acclaimed as of very high standard even by the great western scholars.

When viewed on this background, '*Kalidasa Bibliography*' of Dr. S.P. Narang must be proclaimed unhesitatingly as of immense value not only for the researchers of KALIDASA, who has fascinated for long the people of real literary taste but also for the researchers of the classical Sanskrit poetry as a whole as well. The different aspects and facets of the poet's creative genius have inspired many researchers from the very beginning of the modern Indological studies. There is such an immense literature already produced on this poet alone, that the future researchers cannot proceed any further with any originality unless they are acquainted with it. The immensity of this literature can very well be judged from the fact that it took several years for a scholar like Dr. Narang to collect and register some 3600 different entries in this regard, covering all the different aspects of the all-time great poet dramatist, that was Kalidasa.

Dr. Narang has not only painstakingly and laboriously collected the bulk of the literature written about Kalidasa, including the publications, editions, and manuscripts, along with all the literary and cultural material, but has also covered the entire creative literature produced in this regard. The most important feature of this Bibliography is its *scientific classification* in accordance with the library system, wherein all the 'heads' are followed by the respective relevant material.

The publishers must be congratulated for excellent printing and get up. The Author and Publishers deserve heartiest congratulations of all the Indologists for bringing out such a nice and important work

STUDIES IN RAMANUJA VEDANTA: By Dr. Siddheshwar R. Bhatta; Heritage Publishers, N. Delhi-1; 1975; pp. 210; Rs. 20.00.

'Vedanta' and its philosophical variants have attracted many scholars of the past and present for advancing their own view-points as well as those, necessary from the point of view of research. 'Advaita' of Shankaracharya has remained a point of critical examination from its very inception. Ramanuja was a staunch Vedicist. He preferred the Vedic interpretation of the '*Brahmasutras*', the original treatise of the Vedanta. His doctrine is known as 'Visistadvaitavada', in general. He influenced to a great extent the latter Advaitic thought.

It is in this context, that the present work of the learned scholar must be viewed. The author has proved rightly that Ramanuja was not merely an exponent of an old school of philosophy, but he was an original philosopher in his own right as well. It is refreshing to find a scholar treading a new path and going deep to find the truth. This is the first work of its kind, aiming at a comparative study of Ramanuja's philosophy with that of *Advaita* and *Pancharatra* Schools. The philosophy of Alvars has also been taken up for comparison.

The author deserves all the congratulations for such an intuitive work. The publishers have spared no effort in bringing up such an important work with equal neatness.

THE SACRIFICE IN THE RIGVEDA: By H. Aguilar; Bharatiya Vidya Prakashan, Delhi 1976; pp. 234; Rs. 50.00.

Though the title of this important work may mislead us to believe that this work is mainly concerned with explaining the sacrificial rituals and their intricacies as coming in the Rgveda alone. For a scholar brought up in Indian tradition it may be still more baffling, because he holds the brief that *Rigveda* is not directly connected with the Yajnas, that being the crucial point for *Yajurveda* alone. But after a careful study of the present work one is amazed at the masterly presentation of Dr. Aguilar of the

Vedic sacrificial as well as mythological philosophy in comparison to the Iranian and Biblical ones. He deserves all the congratulations for such a deep and comprehensive critical study. He is no way biased in his approach. Rather, it is heartening to hear from a scholar like him, drenched in western materialistic environment: "...the real chronicle of our species is not that of the progress of man as 'tool-maker', as homo faber, but the history of the blazing visions of Seers and Prophets, who have inspired the lives of the millions of human beings." Apart from this, the method of presentation and the language is also worthy of praise.

It would have been still better had the author widened his scope of criticism so as to include the fire-sacrificial tradition of the Roman and Egyptian cultures also. The get-up deserves a bit improvement.

Studies In The Sectarian Upanisads; By Dr. T.R. Sharma; published by Indological Book House, Delhi, 1972.

As is clear from the title, this work deals with those *Upanishads* only which belong to the one or the other sect; more particularly with *Shaiva*, *Vaisnava*, and *Shakta* sects. These *Upanisadas* are forty-one in number. It was a pity that such an important literature remained neglected for such a long time, only because this was never supposed to be equal in importance to the so-called 'Principal Upanisads', whose sole criterion for being called so appears to be that only those ones were commented upon by the great scholar *Shankaracarya*. This study makes an attempt for the first time to evaluate this vast literature not only from metaphysical point of view alone, but also from the point of view of Ethics, Philosophy and Ritualism. A number of graphs and tables prove that the author has spared no efforts in explaining the mysteries involved in this literature. His style and language are also upto the mark.

Dr. Sharma deserves congratulations for his work, though it requires certain improvements from editorial point of view. We hope that the author will make, further probings in this direction.

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